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JOURNAL

OF THE

NORTH-CHINA BRANCH

OF THE

ROYAL ASIATIC SOCIETY

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FOR 1869 & 1870.

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REPORT

OF THE

COUNCIL OF THE NORTH-CHINA BRANCH

OF THE

Royal Asiatic Society

For the Year 1869.

THE following gentlemen were elected office-bearers at the first meeting of the year:—

W. H. MEDHURST, Esq., President.
Rev. C. H. BUTCHER, } Vice-Presidents.
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R. J. FORREST, Esq., }
T. DICK, Esq., }
F. B. JOHNSON, Esq., }
D. J. MACGOWAN, ESQ., M.D., }

After holding office for some time the Rev. E. W. Syle resigned, and Mr. K. Himly consented to undertake the duties of Librarian. Mr. Alexander Wylie was elected an Honorary Member in consideration of his numerous and valuable services. Mons. G. Eug. Simon, French Consul at Ningpo, and the Rev. E. W. Syle were elected Corresponding Members of the Society.

A list of the Members of the Society is appended.

The following papers were read during the year:—

Suggestions regarding Geological and Paleontological Researches in China and Japan,
by G. Eug. Simon, Esq.

Notes on the last King of Siam,
by Rev. N. A. McDonald.

Report of an Exploration of the new course of the Yellow River,
by Ney Elias, Esq.

Itinerary and Notes of a Journey through the Provinces of Hoo-pih, Sze-chuen, and Shen-se,
by Alexander Wylie, Esq.

On the Early History of Gunpowder and Firearms in China,
by W. F. Mayers, Esq.

Notes of a Journey from Chefoo to Tsiahsien, the city of Mencius,
by John Markham, Esq.

Notes on Banking Institutions in China,
by G. Eug. Simon, Esq.

Notes on the Fabulous Source of the [illegible]
by [illegible]

Notes on Wên Chang, the God of Literature,
by W. F. Mayers, Esq.

The Meetings of the Society have been held during the year in the new Masonic Buildings.

During the month of April the purchase of the Wylie Library, as proposed in documents appended to the published Report of the Society for 1868, was completed, the funds having been raised by public subscriptions, obtained almost entirely by the energy of Mr. F. B. Forbes, to whom the Society and the public are very much indebted for the important Services he has rendered in securing this valuable Library.

Mr. Alexander Wylie was authorized to represent the Society on his return to Europe, and to act on its behalf in whatever manner might seem to him calculated to promote the objects of the Society.

The following books have been presented in the course of the year:—

From Austro-Hungarian Government through Dr. K. V. Scherzer.
[illegible] Novara um die Erde, 13 vols.

Smithsonian Miscellaneous Collections.
VI and VII 1867, VIII and IX 1869.

From the Secretary of the Royal Frederick's University at Christiania.

Al Mufassal, opus de re grammatica arabicum auctore Zamahshario ed Broch. Christiania 1859.

Samling af forskjellige Love etc. vedrörende Kongeriget Norges Handel og Skibsfart. Christiania 1861. (Collection of miscellaneous laws concerning Norway's commerce and navigation with French translation, for Consuls).

Beretning om Landbrugsskolens Hovedgaard for 1862 og 1863. Christia[illegible] (Report of the [illegible])

Guldberg, om Cirklers Beröring, Christiania 1861. (Solution of [illegible] of the Christiania university on the contact [illegible])

Kjerulf, geologiske Kart over Christiania og Omegn, 1866. (Geol. chart of the environs of Christiania with French separate description.)

Frgens og Hiortdahl, om de geologiske Forhold paa Kyststräkninge af Nordre Bergenhus Amt. Christiania 1864. (On the geol. relations on the coast districts of the Northern Bergenhus department.)

Sexe, om Snebraen Folgefond. Christiania 1864. (On the glacier Folgefonden in Norway.)

Astrand, meteorologiske Jagttagelser 1-2. Christiania 1866. (Met. observations.)

Meteorologiske Jagttagelser i det sydlige Norge 1863-1866. [illegible] 1867. (Met. obs. in Southern Norway.)

Bidrag til Bygningsskikkens Udvikling paa Landet i Norge 1. number. Christiania 1865. (Development of Rural Architecture in Norway.)

Treasurer's Report.

In presenting this report I have to call attention to the unsatisfactory state of the Society's Funds. The current expenses swallow up nearly all the receipts, leaving no provision for the publication of the Journal. This result is owing more particularly to the heavy item for Rent; and until this charge on the Funds can be got rid of, the Society cannot do its duty to the public in as efficient a way as might be desired.

W. B. PRYER,

Hony. Treasurer.

BALANCE SHEET OF THE

North-China Branch of the Royal Asiatic Society

Dr. **FOR THE YEAR 1869.** *Cr.*

RECEIPTS.	$	cts.	Tls.	cts.	DISBURSEMENTS.	$	cts.	Tls.	cts.
To Subscriptions and sale of Journals,	677	50	508	12	By Balance			42	42
					„ Sundry Expenses, Advertisements, &c.			124	86
					„ Rent			275	00
					„ Fire Insurance			25	00
					„ Balance in hand			40	84
			508	12				508	12

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REPORT

OF THE

COUNCIL OF THE NORTH-CHINA BRANCH

OF THE

Royal Asiatic Society

For the Year 1870.

THE following gentlemen were elected office-bearers at the first meeting of the year:—

C. W. GOODWIN, Esq., President.
G. THIN, Esq., M.D., } Vice-Presidents.
A. MICHIE, Esq., }
T. W. KINGSMILL, Esq., Corresponding Secretary.
J. BARR ROBERTSON, Esq., Secretary.
W. B. PRYER, Esq., Treasurer.
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F. B. FORBES, Esq., } Members of Council.
W. H. MEDHURST, Esq., }
F. B. JOHNSON, Esq., }
T. DICK, Esq., }
N. ELIAS, Esq., }

A list of the Members of the Society is appended.

The following papers were read in the course of the year:—

On the Incompatibility of the Chinese with Western Nations for Social Intercourse,
by T. W. Kingsmill, Esq.

Note on Chinese Lotteries and Money Jobbing,
by D. J. Macgowan, Esq., M.D.

The Chinese Game of Chess as compared with that practised by Western Nations,
by K. Himly, Esq.

The Convention of Peking,
by J. Barr Robertson, Esq.

Note on the alleged Chinese Discovery of America,
by D. J. Macgowan, Esq., M.D.
Ancient Chinese Historiography,
by J. Haas, Esq.
Notes on the Later Tertiary Deposits in North-China,
by T. W. Kingsmill, Esq.
Note on Bull-Fights in China,
by D. J. Macgowan, Esq., M.D.
Note on Man's Place in the Chinese Materia Medica,
by D. J. Macgowan, Esq., M.D.
Note on the Provincial Examinations of Chekiang of 1870,
by Rev. G. E. Moule.

The earlier Meetings were held in the new Masonic Buildings, but as the premises there were wanted for other purposes the Society rented the large room in Commercial Bank Buildings Nanking Road, and held the first Meeting there on 16th May.

An effort was made to render the Meetings of the Society more popular than they had hitherto been, and several of the above papers were specially prepared with that object. The success that attended both the papers and the subsequent discussion was such as fully justified the expectations that had been entertained.

The following books were presented to the Society during the year:—

Journal of the R. A. S., III, 1868.
Public Ledger.
Smithsonian Report 1866.
Smithsonian Monthly Report 1866, of the Department of Agriculture.
Smithsonian Report 1867.
Memoirs of the Boston Society of Natural History 1868.
Smithsonian Contributions, XV.
Questions on Agriculture.
From the British Foreign Office—
Tree and Serpent Worship.
Notes and Queries.
From the Russian Geogr. Society in St. Petersburg—
Report of the Imperial Russian Geogr. Society for 1869.
Ugleshemide Researches, VI.
Obzor Review of Geogr. Works for 1867-68.
Bulletin de la Société de Géographie, Paris 1870.
Notes and Queries 1870.
Congress, 1 & 2 session. Letter of the Vice-President of the Academy of Natural Science.
Trüoner's Records.
Smithsonian Report 1867.
Annual Report of the Board of Public Schools.
Annual Statement of Trade. Chicago 1868.
Annual Report of the Museum of Comparative Zoology, 1868.
Annual Report of the Department of Agriculture for 1868.

From the Boston Society of Natural History—
Gould, Report of the Invertebrata of Massachusetts.
Agassiz, Speech on Humboldt.
Memoirs of the Boston Society of Natural History.
Proceedings of same, XIII, 1868-69.
Occasional Papers I. (Harris' Entomological Correspondence.)
Foochow Recorder.
Finzi's on Beloochistan Dialect.
Foochow Recorder.
Dr. Porter Smith's Vocabulary of Chinese Proper Names.
Smithsonian Report 1868.
Smithsonian Contributions 1870.
Presented by F. B. Forbes, Esq.—
Histoire des Voyages Traduite par Prevost, 20 vols. Paris 1716.
Osborne's Collection of Voyages and Travels, 2 vols. London 1745.
Collection of Voyages and Travels with Introductory Discourse. (Churchill's Edition), 6 vols. London 1744-46.
Harris's Collection of Voyages and Travels, 2 vols. London 1705.
Engelmann Bibliotheca Geogr., 2 vols.
Kayser's Repertorium.
Bibliothèque Asiatique et Africaine, par Ternaux Compans.
Bibliotheca Orientalis von Zenker, 2 vols.
Presented by E. Milsom, Esq.—
Several volumes of the Lettres édifiantes.

Treasurer's Report.

The Balance Sheet for the year 1870 which I now have to present, though nominally showing a deficit of Tls. 41.57 only, is in reality a very unsatisfactory one, the item for printing being for the 1868 Journal, only now paid, leaving no provision in hand for this and last year's Journals, and a large account for rent still unsettled. It is now apparent that the amounts received every year, do little more than cover the rent and current expenses, leaving the cost of printing a journal unprovided for. It is therefore an absolute necessity that either the number of Members should be largely increased, or that the Society should have a building of its own to enable it to live rent free.

W. B. PRYER,
Hon. Treasurer N. C. B. R. A. S.

BALANCE SHEET OF THE

North-China Branch of the Royal Asiatic Society

Dr. **FOR THE YEAR 1870.** *Cr.*

RECEIPTS.	$	cts.	Tls.	cts.	DISBURSEMENTS.	$	cts.	Tls.	cts.
To Balance			40	84	By Sundry Expenses, Advertisements, &c.			109	30
„ Subscriptions and sale of Journals			7	40	„ Fire Insurance			25	00
„ do. do.	809	32	606	99	„ Rent on account			37	50
„ Balance due Treasurer			41	57	„ Printing			525	00
			696	80				696	80

W. B. PRYER,
Hon. Treasurer N. C. B. R. A. S.

LIST OF MEMBERS.

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Rev. Canon Butcher.
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JOURNAL

OF THE

NORTH-CHINA BRANCH

OF THE

ROYAL ASIATIC SOCIETY.

ARTICLE I.

NOTES ON THE SHANTUNG PROVINCE, BEING A JOURNEY FROM CHEFOO TO TSIUHSIEN, THE CITY OF MENCIUS.

BY JOHN MARKHAM, ESQUIRE,
H. B. M.'s Consul, Chefoo.

ON the 24th of February, 1869, we started from Yentai (Chefoo), our route being through the Tsyhya district in a nearly south-easterly direction. The district presents a succession of lovely valleys, whose sides are well wooded, and in which a considerable quantity of silk, both the mulberry and the Bombyx Cynthia) is produced. We passed many plantations of mulberry trees, while the hill sides had here and there patches of the stunted oak, on the leaves of which the wild silk-worm feeds. The fine white wax so extensively used for making the outer coating of the Chinese candle is also largely manufactured in this district. It is made from the excrement of a small insect that feeds on the leaf of the La-shoo or tallow tree. Great care is taken of this little creature, as it is very scarce and delicate. In the winter it is housed, and during the summer months it is placed upon the tree and carefully watched. The La-shoo is also valuable for its wood, which is used for making pack saddles, and large forks not unlike our hay forks. The villages we passed through were clean and neatly built, and the people appeared happy and prosperous. The Tsyhya district is watered by several streams, none of which, however, are navi-

gable; the largest of these are the Fooshan ho and the Li ho, which empty themselves with the sea not far from Chefoo. Nearly all the streams contain gold, and after heavy rains the country people may be seen diligently washing for the precious metal with their primitive cradles, the only method allowed, as the searching for it in any other way is strictly prohibited.

The valleys are very fertile, wheat and millet being grown in large quantities; orchards of fruit trees are also plentiful. The hills throughout the Tsyhya district have a volcanic appearance; their summits are generally conical and terraced from top to bottom. The valleys impress one with the idea that they formed, at some period or another, the beds of lakes, slate strata lying at different angles, as if they had been upheaved by some great convulsion of nature. Limestone and quartz are frequent, the latter generally running N.E. and S.W.

Laeyang, the first city of any size we reached, is a first class Hsien, in lat. 37°, long. 127° 5′. It has a population, including the suburbs, of about 50,000. The two main streets run north and south, and east and west, and are respectively $2\frac{1}{2}$ *le* and $1\frac{1}{2}$ *le* in length; they are broad, well paved and have a few imposing looking shops; near the gates are handsome pae-lows or monumental arches spanning the street. The suburbs, however, contain the largest shops, and are much more busy than the city. The looms for the manufacture of the strong brown silk goods known as Pongee, are in the suburbs. These goods are made from the silk of the ailanthus or wild silk-worm, which feeds on the leaf of the stunted oak; they are of different sorts, some being very fine and light, others exceedingly coarse and heavy, but all most durable. In Laeyang is held twice a week a large market or fair, and it so happened that one was going on whilst we were there. Crowds of country people had come in with the products of their farms; all were most civil and well mannered, and we never once heard an opprobious epithet used towards us.

From Laeyang our route lay south, through an extensive plain which trends away to the N.W. through this province and that of Chihli, in a nearly uninterrupted line as far as the borders of Mongolia. On the 27th of February we reached the sea port of Kinkia, a small town on the south coast situated at the foot of a small range of hills. The harbour is a safe one, but the anchorage is at least two miles and a half from the town, owing to a sand bank which extends out that distance all round the harbour,

and which at low water is perfectly dry. Flat bottomed boats are used for discharging cargoes from the junks, which come over the the bank at high water and are left high and dry when the tide ebbs. Kinkia at one time had a considerable trade with Shanghai, Ningpo, Foochow and other ports, but owing to the opening of Chefoo, and also to the occupation of the town at different times by the rebels, the business has gradually fallen off, until very little now remains. There are some fine houses and large warehouses in the place, but most of them are now unoccupied and falling into ruin. There is another harbour marked on the chart—Lukia—about 60 *le* to the east of Kinkia, but it has a similar drawback in the sand or mud banks which run out from the shore. Leaving Kinkia we proceeded nearly due south, having the Laoushan range to the east and south-east of us. This range of mountains has numerous large monasteries and temples, to which hundreds of pilgrims resort during the 3rd and 5th month of the year. The priests (of these monasteries) derive a large income from the sale of precious stones which are found throughout the range, rubies and amethysts being amongst the most valuable. Quartz bearing gold is also said to be plentiful, but the search for it is most strictly prohibited. Rhubarb and other medicinal plants and herbs are grown by the priests in great quantity.

The next city of any note which we reached was that of Tsimi, a Hsien of the second class. Entering by the west gate, we passed down the main street to the east gate through a perfect series of paelow arches, some of which are very handsomely carved. The city itself is a poor one, with few shops, but the suburbs contain some of large dimensions and very well stocked. Tsimi has a population, including the suburbs, of 18,000, while the district of which it is the Hsien, has some 150,000 inhabitants. The sea port of Tsimi is Neukookow (on the chart Neukia harbour). I visited this place and found it to be a small town, with about 3,000 inhabitants, composed chiefly of fishermen. I noticed some large and well built warehouses wherein was stored a considerable quantity of cotton. The harbour appeared to be a safe one, and in the channel were anchored a few junks of large size, but here again the sand bank extends quite two miles, and is perfectly dry at low water, so that vessels cannot approach near to the port to discharge their cargoes, and have therefore to make use of flat bottomed lighters. The anchorage besides is not more than half a mile in width. The principal products of this district are pigs

(over 200,000 of which are exported annually), bean cake, pulse, bean and pea oil, animal wax and fruit. Large pear and apple orchards, and numerous walnut and persimmon trees occurred everywhere along our route; the whole plain is well wooded and extremely fertile. About 20 *le* N.E. of Kyauchow we crossed, by a long flat bridge the Takoo ho, which is here very broad and rapid; this stream runs N.N.W. and joins the Kyau ho near the Pimo lake; then flows north-ward and empties itself into the gulf of Pechihli close to the city of Laichow foo. Many years ago an attempt was made to open a communication between the Yellow sea and the gulf of Pechihli by means of forming this river into a canal, so that the grain and other junks from the south might avoid the rounding of the Shantung promontory, but the work was never completed. The distance between Kyauchow and Laichow is only about 250 *le* through a perfectly flat country. It was across this neck that Li Footai two years ago formed his celebrated cordon, for the purpose of keeping the Nienfei rebels in the east of the province; an object in which he signally failed. His fortifications along the banks of the Kyauchow still exist.

The city of Kyauchow, lat. 36° 16′ long. 120° 10′, lies some 18 miles inland, in the midst of a dead flat, which towards the coast becomes a swamp. The city is encircled by high, well built walls in excellent repair, having three gates defended by bastions, while a deep moat surrounds the whole. The city itself contains but few shops, but it is full of large houses, the dwellings of wealthy gentry and literati. The suburbs, which are very extensive, have some large well stocked shops and numbers of warehouses. Many of the buildings in the suburbs are in ruins, the result of their having been occupied at different times by the rebels. Since the last occupation a substantial wall has been built round them, but the place has never recovered the importance it once had as a commercial depôt. The falling off in the trade of Kyauchow is of course in a great measure attributable to the opening of Chefoo, which has drawn away many of the large merchants that were formerly established there, but it is also owing to the fact that the harbour is gradually filling up. Tapoteu, the port of Kyauchow, and distant from it about 6 miles, is itself 8 miles from the mouth of a creek which is only navigable at high water for flat bottomed boats. The mouth of this creek is again fully 4 miles from the anchorage, the distance being over a mud flat which is perfectly dry at low water. Vessels lying in the channel would hence have to

discharge their cargoes 12 miles from the port, and 18 from the city. Added to these disadvantages, Tapoteu is considered very unhealthy, being in a low swampy flat full of lagoons, so that fevers and agues are very prevalent. The district, of which Kyauchow is the Chow, extends 180 *le* north and south, and 95 east and west, and contains a population of about 200,000.

From Kyauchow our road lay over an extensive undulating and highly cultivated plain. The main road on which we travelled must once have been a splendid work, but has been allowed to fall into lamentable decay. It is quite 40 feet broad, but in wet weather it must be nearly impassable, judging from the deep ruts along the whole length of it. It is carried across the streams which intersect the plain, by bridges that have been fine specimens of architecture, but are now almost in ruins, and the fine granite slabs that spanned the arches are mostly replaced by bundles of Sorghum stalks covered with earth. Nearly all the public works in the province are neglected in the same manner. It is really pitiable to see the utter ruin into which everything has been allowed to fall.

The country we now passed through is studded with numerous and populous villages, prettily wooded with walnut, chestnut, apple and pear trees; the tall stately silver poplar interspersed among them, towering above all and adding great beauty to the landscape. A journey of 65 *le* brought us to the little walled city of Kaumi, prettily situated in a basin, or hollow, formed by a rise in the plain. The walls of this city are in excellent repair and about 3 miles in circumference; the suburbs are large, and with the city contain a population of about 10,000. A great deal of tobacco is grown in this district and brought to Kaumi, where it is packed in bales and distributed in all directions. Donkey flesh is largely consumed by the inhabitants of this city; indeed pork and donkey are the only meats eaten. From Kaumi a journey of 125 *le* brought us to Weihsien, the plain across which we travelled being intersected by the rivers Wei ho and Wen ho, both having their source in the Yeshan range, some 200 *le* to the westward. Neither of these rivers are navigable, owing to innumerable sand banks which occur throughout their length, but at certain seasons, after heavy rains, flat bottomed boats ply on their waters. The Wen ho joins the Wei ho near the town of Ngankiu, about 50 *le* west of Kaumi, which latter river empties itself into the gulf of Pechihli, about 20 *le* west of Laichow foo.

Before we reached Weihsien we diverged slightly from our road for the purpose of visiting the coal fields 20 *le* west of the city.

We found the pits in an open plain with some hills about 6 miles to the south and west. There are only ten pits working at the present time, but the whole plain for some distance is covered with old pits. The pits or shafts, are square holes from 15 to 50 feet deep, when they branch off along the seam, which, we were told, is from 2 to 15 feet thick. The mines are worked by gangs of 50 men in each, who are replaced at night, the coal is drawn up by means of a huge windlass, in baskets containing some 100 catties; the water is also drawn up by this windlass in skin buckets holding about 3 gallons. No pumps whatever are used; hence, when the water rises rapidly, the miners are compelled to abandon the pit and open another. It is probable therefore that they miss the finest quality of coal; but what we saw was certainly most excellent, burning bright and clear with very little ash, and throwing out great heat. A considerable quantity of coal was lying at the mouths of the pits, ready to be carted away, and some of it in very large blocks. At the pits' mouth this coal costs 60 cash a picul. It is in great demand at Weihsien for smelting purposes and for use in the iron foundries of that city, and the price there is over 600 cash a picul. Both Anthracite and Bituminous coal are found in very great quantities: indeed the whole plain for miles round is one vast coal field. It was difficult to find out under what regulations these mines are worked. We were told that the Imperial government is kept in ignorance of the fact. Should a proprietor discover coal on his land, he pays the local mandarin a certain squeeze to be allowed to sink a shaft, if he can afford it; if he is unable to do so, the mandarin works the measure himself; no regular government tax is levied. Few accidents occur; last year an explosion took place in one of the pits and 5 men were killed, but an event of the sort is very rare. The price of labour is most moderate; the coolies who work in the mine only receive 150 cash per man per diem, while those above get only 115 cash. The carriage by cart to Weihsien is about 150 to 200 cash per picul. The carts hold from 6 to 10 piculs.

Weihsien, one of the large emporium cities of the province, and the entrepôt for most of the merchandize landed at Chefoo from foreign countries, is in lat. 36° 40′, long. 119° 10′. It is a first class Hsien, enclosed by strong stone walls 50 feet in height, and surrounded by a deep moat. The ramparts are 12 feet broad on the top, with a parapet 4½ feet high, and guard houses every 30 yards. The gates are protected by bastions, and at the north

gate, just outside the moat, there is the double protection of a strong stone tower, three stories in height, with double tiers of guns. The city has some good shops and very large fine looking houses surrounded by high walls, the residences of wealthy gentry and merchants. The suburbs are very extensive on all sides, but particularly on the north and east, where are all the best shops and large warehouses, and where all the business is carried on. In the north suburbs are some large and good inns. A portion of the eastern suburb is walled off and forms a city itself: a river, the Pihtang ho, ruyning between it and Weihsien. This river is not navigable near the city, where it is crossed by a long low stone bridge, but for 25 *le* from its mouth flat bottomed boats ply upon it. The port of Weihsien on the coast of the gulf of Pechihli, is Hiaying, situated between the mouths of the rivers Wei ho and Pihtang ho, (only some 15 *le* apart). Quantities of coal coke and other goods are shipped hence in junks for ports in Chihli and Manchuria. The country from Weihsien to Hiaying slopes gradually towards the sea, so that tramways might be laid with the greatest ease. The distance is only 25 miles.

The shops and warehouses of Weihsien contained great quantities of European goods, and the traffic, while I was there, appeared very great; carts, wheel-barrows, camels, mules, &c. coming and going all day. There are some very large coal depots in Weihsien where I saw thousands of tons of coal stored. Weihsien has large iron founderies where hardware of every description is manufactured. The iron used is principally imported from abroad, but a great deal comes from the neighbouring province of Shansi. Although iron occurs very frequently throughout Shantung, no mines have yet been opened. In the vicinity of Tungchow foo very fine iron has been found and also in many other localities. The population of Weihsien and suburbs is about 100,000.

The next city we visited was that of Tsingchow foo, the ancient capital of Shantung, and now the centre of the largest silk producing district in the province. It lies in a hollow with a fine range of hills rising to the south and west of it. The walls of the city are from 40 to 50 feet in height, very solidly built of stone and in good repair. A moat surrounds the city, which is some 30 *le* in circumference: to the west the moat is formed by a natural stream. The roads in the vicinity of the city have been well paved, and every thing indicates former grandeur; but all public works here, as elsewhere in the province, are rapidly falling into decay

from mere neglect. The city contains some very fine temples and a handsome Mahomedan mosque, to which a school is attached where children are instructed in Arabic. The hall of this mosque is 60 by 45 feet, the ceiling vaulted and supported by three rows of arches, four arches in each row; the walls white washed, the floor covered with fine matting; and the whole most scrupulously clean. The mosque is situated in extensive and thickly wooded grounds. There are 12,000 Chinese Mahomedans in this city. Near the south gate, inside the city, is the Chungfoong miau a large and handsome temple roofed with green and yellow tiles. The ceiling and walls of this temple are beautifully painted with some scene in Chinese history; there are also many very well executed carvings on the eaves of the roof. A great deal of land is cultivated within the city walls, particularly in the N.W. and S.W. where the land rises to a level with the top of the wall. The N.E. and S.E. portions are the most populous. Entering the city by the north gate the moat is crossed by a very fine granite bridge of six arches, quite 40 feet broad and nearly 100 feet long, the span of each arch being about 15 feet. About 2 miles to the north of Tsingchow foo lies the Tartar city, the walls of which are strong and high, but the only inhabitants are Tartar soldiers, to the number of about 2,000. Between the two cities is a very handsome temple called the Chingloongtsze. It is composed of three courts with two storied buildings in each, having deep verandahs both to upper and lower stories. The main hall contains a reclining figure of Budda 25 feet long. The carvings and paintings in this temple are really very fine indeed. It is seldom that I have seen them surpassed. The grounds of this temple are extensive and magnificently wooded with yew and cypress trees of enormous size and great age.

Tsingchow foo is as I have said the centre of the largest silk producing district in the province. At Linkiu, a village 40 *le* from the city, a very large quantity of yellow and white silk is made, some of very fine and beautiful quality; it is all brought into Tsingchow foo, and exported thence, either in its raw state or manufactured, to the capitals of the adjoining provinces of Shansi, Shensi and Chihli. In Tsingchow foo more than one thousand families are employed in manufacturing silk piece goods. Some of the fabrics from these looms are very fine, and superior to the generality of Chinese silk goods. Seeing such a quantity of silk produced I was induced to enquire particularly how so little was brought to Chefoo for sale and how the price for that little was so high, and was in-

formed that all sales of silk must be made through what is called a middle man; this person is responsible to the local authorities, and has to report every sale made, giving full particulars as to purchasers, &c., &c. Hence, when an attempt is made to buy silk for Chefoo, it is reported by this person to the mandarin, who immediately doubles the squeeze, so that it is impossible for the growers to sell the article at a reasonable rate. This practice is common throughout the whole province, and I was told of it by many persons. I also was told by the country people in several silk districts that they would gladly deal with foreigners direct, were they allowed to do so. The plain in which Tsingchow foo is situated is one of very great fertility. Fine wheat crops covered the ground, while plantations of mulberry trees and orchards of dates, pears, apples and other fruit trees are studded all over it. This district is considered one of the healthiest in the province and the inhabitants are famous for longevity.

From Tsingchow foo our route lay due west, and about 25 *le* from the city we passed the tombs of the kings of those ancient tribes who inhabited the eastern part of Shantung. These tombs are high mounds of earth with tablets close to them, and on the road side, which give a sketch of the life of each king. Some of these tablets erected by different emperors are of very great age, others of later date, but the latest is more than 200 years old. The chief tomb is on the summit of a hill and is surrounded by numerous tablets, and the ruins of what appeared to have been a temple or sacrificial hall. Our road took us through many large and populous villages, and the traffic along it was very great; carts, wheel-barrows and mules laden with goods were passed continually. Occasionally the traffic was so great as to impede our progress.

On the 11th of March we reached the city Chechuen, a Hsien at the entrance of the Laufu valley. It is a walled city having extensive suburbs and a large population. It is the distributing city for the coal from the Poshan mines of which I saw thousands of tons stored in sheds and yards. A great quantity of lime is also made here from stones obtained in the bed of the stream, which runs through the valley and between the city wall and suburbs.

Forty *le* down the Laufu, or Poshan, valley we came to the cities of Poshanhsien and Yenshing, both walled, and separated from each other by the Laufu ho, a stream which runs through the valley, taking its rise some 10 *le* distant, in the side of a hill. A temple has been built here in the court yard of which the stream

rises jetting up in a perfect fountain. The stream is utilized half way between its source and Poshan to turn a water mill for grinding wheat, very similar to our water mills in England.

Some distant down the stream we found men fishing with a rod and catching fish not unlike trout which appeared to rise freely; the fly used being a natural one. The valley runs about N. and S. and the coal pits are on either side. The coal from these mines is of most excellent quality, and being situated in the sides of the hills it is much easier worked than at Weihsien, the coal seam is said to be of very great thickness and I saw very large blocks of coal extracted. The pits are worked much in the same manner as those at Weihsien, only as the mines are on the hill side, the water is drained off to a well at the foot of the hill, from which it is drawn up in buckets by a large windlass. The coal at Poshan costs 160 cash a picul at pits' mouth, and it is considered much superior to the Weihsien coal; a sample that I brought back has been pronounced equal to Cardiff. A moderate government tax is levied, but the local squeezes are most exorbitant. A Shanse merchant who has been working the mines at Poshan for some years, told me that were it allowed, and he was protected from the squeezes, he could lay coal down in Chefoo at $4.50 a ton and make an excellent thing of it. He did not complain of the legitimate tax in the least, that he said was fair, but the squeezes, to which the coal is subjected after that has been collected, were what he wished to fight against, if he dared. An attempt to get this coal to Yentai has failed; indeed it may be called a prohibited article for this port. Gangs of 50 men work in the pits night and day where the demand is great, and with this amount of labour the yield from each pit per day is 200 piculs.

In Poshanhsien are extensive potteries; three different varieties of ware are made; one the common red coarse ware, common throughout China; another of a light straw colour; and the third a peculiar metallic looking ware, very light, but having great heating properties. Hence it is much sought after in districts where fuel is scarce. Red paving tiles, and large red water kongs are also manufactured in Poshan. Red lead (ochre) in large quantities is made in the Laufu valley from a precipitate of clay. In the city of Yenshing glass is very largely manufactured and forms a most important article of internal commerce. It is made from a peculiar stone of violet colour, found in the neighbourhood. This is pulverized, and melted with saltpetre. Various descriptions of articles were being

made. I noticed excellent window glass and lamp shades, blown bottles of all sorts and sizes, some of exceedingly elegant shape and beads and ornaments of all sorts. Glass run into rods, about 30 inches long by ¼ thick, and bricks of glass were also being made in large quantities; these are tied up in bundles and packages, and exported to all parts of the country. The pig glass costs about 100 cash a catty at the manufactory. Nearly every other house in Yenshing is a glass factory, and every shop in the city sells it.

The whole of the Laufu or Poshan valley is very rich in other minerals besides coal and iron, but only the former is worked. Some years ago a silver mine was opened, but owing to some dispute, it was soon closed again and the working of it is now prohibited. Saltpetre is also found in this valley. A great deal of the Poshan coal is shipped at the port of Litsing, at the mouth of the new Yellow River, and might very easily be brought from thence to Yentai, Litsing is only about 260 *le* from Poshan, and 500 from Chefoo.

Changkiuhsien, a walled city 100 *le* from Tsinan foo, is only important as being the first large town on the high road east of the provincial capital and therefore the first place of call. The city is small and contains no shops or buildings of importance, but the eastern suburbs, which are walled and form, as it were, a separate city, are larger and contain some fine and well stocked shops, also large and convenient inns.

On the 15th of March we reached Tsinan foo the capital of Shantung in lat. 36° 50′ long. 117°. This city is prettily situated, at the foot of a high range of hills, while a fertile plain slopes down towards the Tatsing ho, or new Yellow River, to the north of the city. The walls of the city are high, strong and in excellent repair, the suburbs, which are very extensive, are likewise walled, while the whole is surrounded by a mud wall with a deep moat beyond it, making the circumference of the fortifications 85 *le*. The intervening space between the walls of the suburbs and the outer mud wall, is highly cultivated. The city is full of springs of fine water. In the north part of the city is a lake, called the Taming ho, with artificial islands, having tea houses built on them. These are the resort of pleasure parties during the summer months. Just outside the west gate is a large temple built round a small sheet of water crossed by a handsome bridge; this sheet is formed by springs which jet up at least two feet high. Fairs are continually being held in the court yards of the temple, which is called the Lotoo shuan.

In this vicinity is also a fine Mahomedan mosque, and a temple to Confucius, both situated in well wooded grounds. The city contains some very fine shops and public buildings. The main street runs east and west, is about 2 miles in length and some 20 to 25 feet in breadth, and is full of large well stocked shops, in many of which I noticed quantities of European goods. The streets were very crowded, and the place has a busy thriving appearance. Within the city are many fine public buildings, the most prominent being the extensive examination hall, the palace of the Vice-roy, the yamens of the Fantai, Heotai and Nientai, and the drum tower. All these buildings are situated in well wooded grounds. There is also a Roman Catholic cathedral, which is just completed, and reflects much credit on the designer. Monsegnior Cosi the Catholic bishop of Shantung, from whom we received much kindness, took us over the building. The ceiling is beautifully painted, representing Adam and Eve driven out of paradise; this painting is the work of the Père de Nisco one of the resident Fathers at Tsinan foo, and is undoubtedly a work of much merit. Attached to the bishop's residence, and in the same enclosure as the cathedral, is an orphanage and school. The suburbs of the city are very extensive and contain large shops, and two Mahomedan mosques. The Mahomedans in Tsinan foo number over 20,000. The north part of the city lies very low and is considered unhealthy in the warm weather, fever and ague being very prevalent. Hence the mountains to the south on which are some large monasteries are much frequented during the summer by the inhabitants. About 12 *le* to the east of the city is a hill which appears to be one mass of iron ore, lumps of it were lying on the surface, and so magnetic as to affect my compass at some distance. Near this hill Monsegnior Cosi has a large establishment, with orphanage, schools, &c., &c. Tsinan foo is within 5 miles of the Tatsing ho, or new Yellow River.

I visited the old port of Kukow, 16 *le* north of Tsinan. It must at one time have been a place of considerable importance, but now there is no trade whatever there, and its fine two storied houses and large warehouses are falling into ruin. The place suffered much from having fallen into the hands of the rebels, but its destruction and consequent abandonment as a port of trade, is mainly due to the fact that once, and sometimes twice every year, the river overflows its banks, and the inundation that follows at this particular spot, carries all before it. Last September the floods came up to the walls of Tsinan foo itself. The Tatsing ho appeared to me

to be, at this place, about 200 yards broad but from bank to bank was about 300. The stream is very rapid and deep, but I doubt much if it is suited for steam traffic owing to the shifting nature of the sand banks. These I was told are continually being formed and carried away, so that the dangers to navigation would be very great. I saw some junks in the river, but none of any size, they are flat bottomed and propelled by sails and sculls, while against the stream tracking is resorted to. Some distance above Kukow is an old bridge that once spanned the Tatsing ho, but is now in mid-stream. Tsitung, a port on the new Yellow River 100 *le* east of Tsinan, has been now substituted for Lukow as the port of the capital.

From Tsinan foo our route lay south along the western foot of a fine range of mountains. Some 30 *le* from Tsinan we joined the imperial high road from Nanking to Peking. This must have once been a magnificent work, but is now falling into rapid decay. Here and there fine bridges span streams and ravines, but all are sadly in want of repair. We passed through numerous large villages all bearing traces of civil war; the people told us that they suffered quite as much from the Imperial soldiers as they did from the rebels, and at times even more. As we neared Taengan foo the scenery became very pretty. We passed through a lovely valley with the Tae shan range to the east, and low rugged mountains to the west; some 15 *le* from the city we entered a plain which seemed to be very fertile and well wooded. Taengan foo is situated in this plain at the foot of the high range rising at its northern extremity. The city is a square, having good substantial walls and extensive suburbs, but the streets are badly paved and very dirty; it contains some good shops, but the best are in the western suburbs, in the environs of which is an iron pagoda some 40 feet in height. It was built by Wanleih of the Ming dynasty in obedience to a request of his mother, who took a fancy to the spot on her way south. He also built a temple in the vicinity and placed in it an image of his mother. This temple was repaired by the present dynasty, but totally destroyed when the rebels occupied the surrounding country, and is now in ruins.

The whole of the northern part of the city is taken up by the grounds of the Taeshan temple. The park, in which this large and imposing edifice is built, covers some 25 acres of ground, and is wooded with fine cypress and yew trees of great age and enormous size. The whole is surrounded by high walls and entered through

a gate as large as any one of those in the city walls. A fair was being held in these grounds, while we were there, and we found collected many thousands of persons from all parts of the empire. Here were refreshment booths, stalls for the sale of every description of toys, temporary theatres, peepshows and whirligigs; while itinerant musicians, jugglers and conjurers performed everywhere. The crowds seemed in the highest of enjoyment, but were good tempered and civil. They of course were curious, many seeing foreigners for the first time, but there was no incivility shown whatever; not once did I hear the term "foreign devil," yet it must be remembered that in all probability we were the first Europeans seen by the greater number of the people. The main temple or hall is raised some 12 feet over the ground, and is built on a terrace bearing a marble balustrade around it. The hall is 120 feet long by 50 broad, with a verandah all round 14 feet deep and supported by handsomely carved marble pillars. The roof is tiled with green and yellow glazed tiles, the eaves beautifully carved and painted. Within this temple, enthroned in a massive chair upon a raised platform, is a statue representing the emperor Shun, who is said to have dedicated the Taeshan to the God of Heaven and Earth on the occasion of his first tour through the kingdom, when he was acting as vice-roy for Yaou in the 74th year of the latter's reign. The legend is that he again visited the mountain in the 5th year of his own reign, about 2254 B.C., and that on this occasion he sacrificed thereon, and gave audience to the nobles and chiefs of the wild tribes who inhabited this part of China, and instructed them in the arts and sciences. The walls inside the temple are covered with an exceedingly well executed panoramic painting of an imperial procession, wherein the white elephant has a prominent place. This painting far exceeds any work of the sort I have ever met with in China, and is really a master-piece of art.

The ascent of the Taeshan is made by a winding road 12 miles long, which is one long flight of stone steps. It commences just outside the north gate of the city: at first it leads up a sort of gorge and is by no means steep, but the incline becomes greater and greater as one goes on, until at last it is nearly a vertical ascent for some 3 *le*. I estimated the altitude from the foot of the hill to the summit to be about 5,000 feet. For the first 1,600 feet the road is lined on either side with cypress trees. Above this, and nearly to the top, these are replaced by fir trees. Little more

than half way is a grove where tradition says the emperor Shun took shelter during a storm. A temple marks, near this spot, the height which Confucius reached, for it appears that he never succeeded in getting to the top. We passed hundreds of pilgrims ascending and descending, natives of all provinces. Numerous beggars lined the road importuning the pilgrims for alms; these wretches live in caves along the road side. Tablets, cut in the rocks and erected by imperial or other visitors of distinction, occur frequently, while the names of emperors, vice-roys, governors, &c. cut deeply in the rocks on every hand also denote who honoured the locality or were honoured by making the ascent of the Sacred Mount. Here and there are sacrificial temples, but only one rest or refreshment station occurs throughout the whole line of ascent. On the summit are several temples. One in the centre, called the Laoumo Miaou, where barren women sacrifice, is the largest. This is a large court with two smaller temples forming two sides of the court. The main one is tiled with iron tiles, and the two smaller ones with brass tiles, while the entrance porch has the green and yellow tile. In the centre of the court is a handsome pavilion containing an image of the "Holy Mother." The large temple was closed, being only opened on the 18th of the 4th month of each year by the vice-roy in person, or by some one deputed by him, who takes away the offerings, sycee, cash, old shoes, &c. deposited therein through a trap in the main door way, by the women who have occasion to seek aid from the Holy Mother. In the same court-yard, and fronting the large temple, are two bronze tablets 14 feet in height, erected by the emperor Kienloong, who also rebuilt the temples on this hill. To the east of the large temple is another called the Tungyoh Miaou, and to the west is a hall to Confucius. At the back of the Laoumo Miaou is a great tablet some 40 feet in height cut in the rock during the Tang dynasty. All the temples on this hill are Taouist. The highest peak is called the Yuhwang Shangte; here is a tablet also erected during the early part of the Tang dynasty. The view from this peak is magnificent; to the N.E. and N.W. we looked down upon range after range of mountains as far as the eye could reach, while S.E. and S.W. extended the plain in which the city of Taengan foo—looking like a square in a chess board down at the foot of the mountain—is situated, with an occasional mountain rising out of the level here and there.

We spent the night on the top of Taeshan, also called Taetsun (great honourable), with the thermometer down to 14°, and the next morning we commenced to descend at 9.30, reaching the foot at 12.30, the ascent having occupied just double this time. Near the foot is a Taouist nunnery which we visited. It is very well kept and far cleaner than the monasteries or temples presided over by priests, while the nuns themselves were remarkable for their cleanly appearance and neat dress, but I understand that they are not famous for their chastity. Near this nunnery is a monastery which contains, in a sort of vault, the skeleton, with the skin dried upon it, of a Taouist priest who died in the commencement of Kanghe's reign, some 200 years ago. He is sitting cross legged in the usual way in which a priest is placed after death, and is dressed in fine yellow silk robes. He was celebrated for his piety, and was the high priest of this temple. I may here mention that amongst the pilgrims we met on our way up, was a man evidently of high rank, who made a point of saluting each one of our party (we were three) as we passed him, in the politest manner possible; on enquiry who this official was, we were told that he holds office of high grade in Yangchow; this at once accounted for his civility to foreigners, for I am sure that had we met him before our naval forces visited that city, he would have passed us by with the utmost indifference and contempt.

Taengan foo is the centre of a silk producing district, and some silk piece goods are manufactured in the city. Here again the same reasons were given us to account for the dearness of silk in Yentae. The officials do all they can to make its sale to foreigners prohibitive. The growers and manufacturers would only be too glad to do business on a liberal scale, were they allowed. We heard this from the silk dealers themselves. A great quantity of tobacco is grown about this vicinity, and a very large trade is carried on in dates; orchards of these trees occurring everywhere.

We now proceeded on towards Kiufow, the city of Confucius, passing through several large and populous villages. The whole country is full of historical interest, and pages might be filled with description of it, but I will pass this by and come at once to the most interesting portion of my journey.

On the 23rd March we arrived at Kiufow hsien, lat. 35° 45′ long. 117° 10′. Besides the usual four gates this city has a second south gate which is only opened to an imperial visitor; this gate leads straight to the temple of Confucius. The temple and ducal palace

occupy nearly the whole of the N. and W. parts of the city and are both situated in magnificently wooded grounds of very great extent. The grounds of the temple cover some 35 acres, and its trees are remarkable for their enormous size; they are principally cypress, yew and fir trees. On arriving at this city we sent our cards to the representative of the family with an intimation that if convenient we would do ourselves the honour of visiting him, and received a reply to the effect that he would be very glad to see us. Accordingly we proceeded to the palace and were ushered into the outer court through the large main gates. Here we found a number of the retainers of the duke drawn up on either side to receive us, all men of tall stature and exceedingly well dressed; we next passed through other gates into a second court, and again through a third gate into a third court, retainers lining the way from outer to inner courts, where we found the duke himself with his uncle guardian and several near relatives, awaiting us. He advanced and made the customary Chinese salutation, when we all proceeded into the large public reception room; he did not detain us here, but begged us to proceed on to his private study, which we accordingly did. Having all seated ourselves according to the usual Chinese etiquette we conversed on different subjects. The duke is only 22 years of age, about 4 ft. 6 in. in height and slightly deformed, but with an exceedingly pleasant manner: he has a face of a singularly attractive character and a highly intellectual expression. He is the representative of the 75th generation. I was much pleased with the reception he gave us, for, judging from the manner in which I had hitherto been received by the mandarins, I did not expect that this nobleman would deign even to see me; more particularly as I was informed that a vice-roy on being admitted to an interview has to make the 9 kowtows or prostrations before him. His title is that of Kungyeh, or duke, and he receives a large pension from government. His relatives present at this interview were all tall well formed men, and I could not help fancying that their manner contrasted most favourably with that of Chinese officials in general. There was nothing reserved about these mandarins, they seemed anxious for information, and those who afterwards took us over the temple questioned us very minutely on all subjects connected with foreign countries. The study in which the duke entertained us was a small room, the walls covered with shelves of books; here were collected many relics of the sage, in the shape of bronze urns, tripods and censers, and ancient manu-

scripts. On taking leave of the duke, he insisted upon escorting us nearly as far as the outer gate, and expressed the pleasure he felt at having made the acquaintance of foreigners.

We next proceeded to the tomb of Confucius. It is situated to the north of the city and about a mile and a half from it. The approach to the cemetery of the family is through a splendid avenue of fine cypress and yew trees a mile and a half in length. This avenue was planted by different emperors during the Ming dynasty, who also erected the fine and magnificently carved paelows which span the road, and the bridges which cross imaginary streams. Two pavilions roofed with the handsome green and yellow porcelain tiles, are erected half way up the avenue; these contain tablets of marble placed here in honour of Confucius by the emperor Wanleih of the Ming dynasty. The avenue leads up to the large gates of the cemetery which is surrounded by high walls enclosing between 45 and 50 acres of ground, thickly wooded with cypress, cedar, oak, chestnut and yew trees of enormous size and great age. From the grand entrance gate we turned to the west, and passed up a second avenue, along which were lions, elephants and other animals carved in stone. At the end of this avenue we came to a large hall where the descendants of Confucius come twice a year to offer sacrifice. This hall faces the tomb itself, and is simply a large building with a handsome roof tiled with green and yellow tiles, it contains no image or tablet. Near this is the trunk of an old tree, said to have been planted by Szekung one of Confucius' disciples, close to it is a handsome pavilion erected by the emperor Kienloong of the present dynasty. Farther on we came to the tomb of Tszesze, the grandson of Confucius, who, it is said, was the teacher of Mencius; it is a high mound of earth and lies to the east of Confucius' tomb and about 15 yards from it. We were now in front of the sage's tomb, a high mound covered with brushwood; in front of it is a stone table, nicely carved, a stone urn, and a huge tablet with seal characters engraved on it, representing the name and titles of Confucius. This tablet is 20 feet high by 5 feet broad. On the west of the tomb is a building of no architectural beauty, erected on the spot where Tzekung is said to have sat for six years mourning over his master's grave. On the west is also the tomb of Confucius' son; close to this is the mound wherein lie the remains of Confucius' mother. Numerous tomb stones all over the cemetery, mark the resting places of the descendants of the sage, the tombs of the heads of the Clan being distinguished from those of less important

members by high mounds, having figures of animals and men larger than life in front of them.

On our return to the inn we were agreeably surprised to find that a mandarin had been sent from the duke to return our call, and to inform us that the gates of the great temple would be opened for us. This was a mark of favour, in as much as this day being the anniversary of the death of one of the representatives of the family, the temple was closed to the public. We accordingly proceeded with our guide and entered the grounds of this most interesting temple. I have never seen anything in China to equal this place. The extensive grounds are most magnificently wooded and are full of beautiful temples and pavilions with tablets of every date. The antiquarian would here have a grand field for labour. The main temple is built upon the spot where Confucius lived, and is composed of twelve halls, each one having a square to itself shut off from the others by massive gates; the sides of each square being lined with cypress trees. The great hall is in the third court or square; it is 160 feet long by 88 broad, with a verandah round it 15 feet deep supported by 18 magnificent white marble pillars in front. Each pillar is a solid block of marble, 25 feet in height, and 3 feet in diameter, and each is most elaborately carved with two dragons reaching from bottom to top. There is a like number of pillars behind, only each alternate pillar is of black marble, and on either side are 9 pillars of the same size of variegated black and white marble. The roof of this, as of the other buildings, is tiled with green and yellow porcelain tiles, the former colour predominating. The eaves are most beautifully carved and painted. The large hall contains a statue of Confucius 16 feet high, seated on a throne raised some 5 feet from the floor and enclosed with heavy yellow silk curtains most beautifully embroidered with red and blue dragons. The statue represents a strong thick set man with a fine full face and large head; he is looking upwards, and holds a scroll or slip of bamboo in his hand. A small tablet surmounts the statue with the simple inscription "The most holy prescient sage Confucius, his spirit's resting place." In front of the statue is a high table whereon are deposited relics of the sage, and presentations from different emperors. Amongst other things we saw some magnificent copper enamelled vases, (the blue, yellow and green colours of which were far superior to those of any I have ever seen before), as well as bronze tripods and urns of very ancient dates. One curious round vase of bronze and a dish of the same metal, were

said to be of the emperor Yaou's time (B.C. 2300), and two censers bore date of the Shang or Yin dynasty (B.C. 1700—1150) while a couple of bronze cows, also of same date, greatly interested us. A massive rosewood table was also pointed out as the one actually used by Confucius. Besides the statue of the sage are those of his son and grandson. In the east of the hall are ranged in order the images of his twelve favourite disciples, and on the west stands one of Mencius. The hall is panelled with slabs of black marble, each slab bearing an engraving representing some one scene in the life of Confucius, so that the whole form an illustrated life of the sage. One slab has a portrait of Confucius, said to have been taken during his life. On either side of the court in which this splendid hall is built are rooms, numbering altogether seventy two, or one for each of his disciples. The other halls are in honour of his father, mother, wife, son, grandson, Mencius and four of his favourite disciples. In each hall is a simple tablet bearing the name and title of the person to whom it is dedicated. We were shown the aged trunk of a cypress tree said to have been planted by the sage himself, and we drank out of the well, from which he also drank. In the same court as this well is a tablet of black marble on which is engraven a genealogical tree, giving all the branches of the Confucian family, and showing the present representative to be of the 75th generation. This tablet bears traces of great age, and is so cracked as to render rubbings from it nearly impossible; hence we were unable to obtain one, although we were fortunate enough to get rubbings from the engraved marble blocks and other tablets. The present temple has been renovated within the last five years and is in magnificent order, resplendent in gilding, paint and carving. In one of the temples are four tablets in honour of Confucius bearing the inscription "The teacher of ten thousand ages;" these were erected by the emperor Kanghe of the present dynasty. A portrait of Confucius in marble has also a place in this temple; it represents an old man, but the drawing is very indistinct from age.

The spacious grounds of the ducal palace adjoin those of the temple, and are likewise surrounded by high walls. The palace is built on the site of Confucius' house, in the walls of which it is said that many manuscripts of Confucius were concealed during the emperor Tsin's reign (B.C. 212) to preserve them from the destruction to which that monarch doomed all literature within his reach.

We next visited a temple in honour of Yenhwuy, the favourite disciple of Confucius who mourned so long for his master's death. This is built in extensive and thickly wooded grounds just within the north gate of the city. The hall is similar to that of Confucius, only on a smaller scale, being 100 feet long by 45 feet broad. It is supported on handsome marble pillars, and contains an image of Yen, seated like his master on a raised throne with handsome embroidered silk curtains. On a table in front of the statue are some very fine old bronzes, and a tablet surmounts Yen's image with the inscription "The perfect man who attained to holiness, equal to the holy man." Another temple of smaller dimensions is erected in honour of Yen's wife; this only contains a tablet. Other buildings within the grounds are erected to his father and mother. To the east of the main tablet is a magnificent silver pine tree over 150 feet in height, and 20 feet in circumference. When we asked its age, we were told 10,000 years! The date when it was planted is not known. A well used by Yen is shown and two handsome tablets in pavilions are built on either side of it, erected by emperor Kanghe. Close to the silver pine tree is another tablet in a pavilion marking the site of Yen's dwelling. His descendants come here twice every year to offer sacrifice. The south face of the grounds in which this temple is built has along the whole length of it—300 feet—a balustrade of white marble most beautifully carved. Yen's tomb lies just outside the city in a fine grove of cypress trees; it is about a mile from the burial place of the Confucian family, and is likewise the cemetery of the Yen family.

Just outside the N.E. corner of the city is a temple to Chow-kung, a great statesman. He was prime minister to his brother Wu, the founder of the Chow dynasty. Chow is said to have been the inventor of the Chinese mariner's compass. This temple, like the others, stands in extensive grounds full of aged trees. In the hall is a figure of Chow seated on a throne; it represents a large thick set man with a fine intelligent face. Just outside the hall is a great tablet on the back of an enormous stone tortoise erected by Kien-lung in honour of Chow. To the east of Chow's temple is the tomb of the ancient Shaouhaou, but this I had not time to visit. About 20 *le* to the eastward of Kiufow is a range of hills called the Nishan, in a cave in one of which Confucius is said to have been born. Kiufow is a clean well built city, but of no strength in fortifications, its great safeguard being its historical character. When

the rebels approached the city, they demanded that the mandarins should be given up, but when they were told that all the officials were of the Confucian family, they departed and troubled the place no more. The inhabitants are chiefly descendants of the sage, eight out of ten families bearing his surname.

From Kiufow we proceeded to Tsiu hsien, the city of Mencius, only 40 *le* south from the former, taking on our way the tombs of Mencius' mother and that of the sage himself. To do this we had to make a detour of about 60 *le*, both these cemeteries being about 20 *le* to the S.E. of Tsiu hsien and some 10 *le* apart. The tomb of the mother is situated in a handsome wood having a range of hills to the S.E.; the grounds are not walled in, but appeared very extensive and full of the tombs of descendants of the sage, the tomb-stones bearing the name and generation of the person inscribed thereon. The most easterly tomb of all is a high mound with the usual stone table and urn; in front is also a stone tablet in honour of Mencius' mother, whose remains lie beneath the mound, and on either side are other tablets explaining events connected with her life. A small temple is built not far from the mound, where the descendants prepare sacrifices. As much honour is paid to the memory of this woman as to that of Mencius himself. About 10 or 15 *le* to the S.W. of this is a fine forest of cypress and yew trees covering the side of a hill, and in this forest is the tomb of Mencius. It is approached from the city side by a splendid avenue of old yew trees, three quarters of a mile in length and forty feet broad. These trees were planted by emperors of the early part of the Ming dynasty. The sacrificing temple faces the tomb, which is a huge mound of earth covered with trees and brushwood. Immediately in front is a great stone table and a large stone urn; on the east a tablet erected by the emperor Yungchêng in the 10th year and 6th month of his reign (A.D. 1723), and on the west another tablet of much earlier date, all in honour of the sage.

Tsiu hsien is a walled town at the foot of a range of hills which have a prominent place in Chinese history. One of these hills, a peak called Yeh shan, is famous even now for its natural curiosities. There is one rock shaped like a drum and another like a huge bell which are pointed out to the visitor.

The temple of Mencius, about a mile outside the south gate, is built in extensive and well wooded grounds, with high walls around. It is far inferior to that of Confucius or even to the temple in honour of Yenhwuy, but is nevertheless an imposing handsome edi-

fice. Entering the main gate from the street you pass up an avenue of old cypress trees, on the left hand of which are ranged a great number of marble tablets, erected by emperors of the Han, Sung and Yüan dynasties. One or two of these tablets are in Mongolian characters. On the right hand side is a pavilion where may be seen a tablet erected by Kienlung and another by Kanghe in honour of Mencius. The temple is in the usual form of Confucian temples; the main hall built on a terrace some 6 feet from the ground. The verandah is supported in front by eight handsome white marble pillars with dragons carved round them; these are much the same as those at Confucius' temple, each one solid piece of marble; the same number support the back verandah, and four each of the two side verandahs. Within the hall and facing the entrance is a statue of Mencius and another of Yohchingtsze his favourite disciple, the first represents a stout thick set man with a pleasing but determined expression of countenance, and is said to be a good likeness; the second also a lively strong man but of a sulky expression of face. In front of these images are the usual sacrificial tables and incense urns and pots. There is also an engraved likeness on marble of Mencius, said to have been taken during his life time; it represents a very old man, but is very indistinct and the lines are but just discernible.

Behind the main hall is a smaller one in honour of his father, another of his son, and a third of his wife; all these halls contain simply tablets bearing the name and title of the person to whom they are dedicated and the inscription "The spirits resting place." In the court of the main temple is a curious old well which is said to have been opened by a thunderbolt; also the trunk of a tree which Mencius is said to have been planted. The temple to Mencius was originally built by the emperor Shêntsung A.D. 1068, during the Sung dynasty.

The present representative has the title of Po-tsze and is a member of the Hanlin college; this honour is hereditary in the family, the head of which like the representative of Confucius also receives a pension from government. The mansion wherein he resides is opposite to the temple but I was not able to see him as he was mourning for his father, whose death occurred only twenty eight days before our arrival, at the age of seventy. The present head of the family is over forty years of age, and he represents the 71st generation. His son is a lad of thirteen.

Not far from the south gate is a temple in honour of Tzetsze, grandson of Confucius. It is built on the site where Mencius taught

and lived, and contains an image of the scholar representing him as a student. Close to the south gate is a tablet in honour of Mencius' mother, the front face containing an inscription eulogizing her virtues, and the back being engraven with the story of her cutting the web. There are also two other tablets here; one, stating that Tzetsze dwelt on this spot and composed the classic of the Chung-yung, and the other, simply in honour of Mencius, enumerating his many virtues.

The city of Tsiu hsien is a poor place, although very prettily situated and on the high road between Nanking and Peking. The streets are narrow and very dirty. All the inns are in the south suburbs and there is no life or bustle except in that quarter.

I here parted with my travelling companions, they going south to Shanghai viâ the Grand Canal from which Tsiu hsien is only distant 70 *le*, and I taking a N.E. course back through the province. For some days my route lay over a mountainous country with the Yoh shan and Cheang shan ranges north and south. In these mountains I met with iron in considerable quantity and was told that coal existed in the last named hills but that no pits were opened. The first city of any note I came to was Szeshui hsien, a small walled town with extensive eastern suburbs. Much silk both of the mulberry and oak tree worm is produced in the neighbourhood, and silk fabrics are manufactured in the city but to no very great extent. The town is built on the banks of the Sze ho, a river of historical interest, and famous for precious stones; it must at one time have been a stream of considerable importance, but sand banks are now forming and gradually filling it up. I travelled along its banks for some distance and judged it to be about 200 yards broad, very rapid and in some places deep; it has its source in the Yoh shan hills and empties itself into the Sho shan hu, a lake on the Grand Canal about 50 *le* from the city of Yenchow.

Outside the eastern suburbs of Szeshui hsien is a temple to Tzeloo, a favourite disciple of Confucius, who was killed in battle against rebels, B.C. 479, a death predicted by the sage. This building is similar to that of Mencius only on a smaller scale. In the well wooded grounds are many tablets of great antiquity erected by different emperors. The hall contains a statue of Tzeloo representing a dark fierce looking man. Although Tzeloo is held in great veneration, the temple to his honour is by no means well cared for and is rapidly falling into decay.

Mungyin hsien, the next city I passed through, is in a valley at the east of the Paouyu shan. In the vicinity I noticed many mulberry plantations, and also on the hill sides some patches of the stunted oak. Silk fabrics are manufactured in the city, but to no great extent, the principal business of the place being in salt, for which it is a depôt. I noticed some very large warehouses with quantities of salt stored therein. Mungyin hsien is but a small city, but the eastern suburbs are extensive and populous, and it is there that the chief business is carried on.

Yishui hsien is a little walled town on the banks of the Yi ho, and is the smallest city I have seen in China, the distance between the north and south, and east and west gates not being more than a quarter of a mile. The suburbs are however very large and populous, a good wall surrounding them and running over a hill to the south of the city. I saw some very good shops in the southern suburbs, and a great traffic seemed to be going on in beancake and pulse oil.

I now crossed my outward route at Wei hsien and travelled along the high road to Laechow foo, a city which lies 3 miles distant from the coast of the gulf of Pechihli with the river Kyau-chow running past it. It is the cleanest city I have visited in China; the walls are in excellent repair and surrounded by a moat full of clear good water; the streets are broad, well paved and have a good drain down the centre, while on either side are side walks 8 feet broad. In Laechow are manufactured soapstone ornaments in great numbers, and the straw braid which forms an important article of export from Chefoo.

Continuing along the main road for about 175 *le* we reached Hwang hsien, the great entrepôt and distributing city for the merchandize landed at Chefoo. It is a populous and busy place and is so well known to foreigners that I need give no description of it here. I was now only 160 *le* from Chefoo, which port I reached on the morning of the 5th of April, having been absent just forty days.

The products of Shantung are multifarious and important. Besides coal, iron, and gold, it contains silver, lead, asbestos, and other minerals, while quarries of fine marble and granite occur frequently. Limestone is found in abundance throughout the province, and also different sorts of clay from which is manufactured porcelain of various kinds. Geologically Shantung is one of the most interesting of the provinces in China. Silk as I have stated is cultivated to a far greater

extent than is generally imagined, and fabrics of very superior quality are manufactured in many of the cities. In the cities of Tsinan and Taengan I saw some silk fabrics of most excellent texture, and quality. The wax produced from the insect that feeds on the Lashoo tree is also very valuable. Cereals of every description are largely grown in all the plains and valleys. Hemp, tobacco, pulse and fruit of all sorts are most plentiful. A great deal of pulse oil is also made in many of the districts and forms a very important article of export.

The mode of travelling in Shantung is either by cart or in mule litters; the latter I consider by far the preferable conveyance, for the occupant of a litter does not get such a jerking as the carted traveler. In places where the road is bad, this jerking becomes most frightful, almost dislocating the bones in one's body. The carts are rough contrivances without springs of any sort; they are drawn by two mules tandem, the driver either sitting on the shaft or walking alongside. The usual distance travelled per diem is 100 *le*. The mule litter is of two kinds, one called Tokeou, and the other a Shensze. The former is a sort of box, the body about 4 feet in length and 3 feet in height, composed of light boards and roofed with matting; the latter has simply a succession of crutches for the bottom, and is covered over with mats, which form the roof and sides. Both are slung by two stout poles between two mules, one before and the other behind. By making up a good bed, either of these contrivances may be found very comfortable, particularly the Tokeou, if it be a private one made to order, with the sides venetianed instead of papered as the hired ones generally are. To travel comfortably, a traveller requires one cart, Tokeou or Shensze, for himself, another for his baggage and one between two servants. The muleteers who go in charge of these are a very difficult set to deal with, always persistently endeavouring to cheat the traveller in every possible way. The proper price in Yentai for a Tokeou or Shensze is 1,200 cash a day, and it is customary to give an advance at starting on a journey, and about 800 cash each day to the muleteers, the remainder being paid when they are discharged. Ten hours a day and 10 *le* an hour is the usual time and distance expected, but of course the rate of travel depends much upon the country passed through. In hilly districts 8 *le* an hour is as much as can be got out of the mules.

In almost all the inns the traveller is awakened before daylight by the noise of muleteers feeding their mules and preparing to

start. The inns along the high roads are pretty good, but on the by-roads they are most wretched as places of rest. The better class is generally composed of a succession of blocks with court-yards between. The entrance is a shed, the centre portion opening by large gates on to the street and forming the passage of ingress and egress, and the side portions being partitioned off by counters, one side as a kitchen and the other side as a sleeping place for servants. In this is a large kang or bed place raised some two feet from the ground, built of bricks and covered with a mat. These kangs are heated, and in cold weather dozens of Chinamen may be seen sleeping on them, packed like herrings in a barrel. Passing through this entrance you come to a court-yard with sheds on either side for mules, and small rooms for the lower class of travellers and muleteers. Facing the entrance is a block which generally consists of three rooms, the centre one used as a sitting room, and two off it as sleeping rooms; the only furniture consists of a table and two chairs in the centre room and a kang and bench in each side room. In some inns there are no side rooms, and the traveller has to live and sleep in the one apartment. In the large inns there are successions of court-yards and guest chambers, but in the smaller ones only one or two, and it is occasionally very inconvenient to the European traveller to find only a few inns in the place he stops at, and these full of Chinese. I must, however, bear witness that invariably, if it were possible, the best apartment would be cleared for us, the Chinese guests contenting themselves with one room. The better class of inns have tiled floors, and occasionally the rooms are papered and ceiled, but by far the larger number in Shantung have mud floors and no ceiling whatever. I have frequently had to put up at inns of most wretched description and dirty beyond imagination. On one occasion my travelling companion and myself had to sleep on a kang not 5 feet 6 in. long by 4 feet broad; there being no other accommodation, and to lie on the floor was impossible, as the room was filled with oil vats and coffins, the latter not empty. I have frequently wondered, on getting up in the morning and seeing a place by daylight, how it was possible we could have put up with such filth, but the weary traveller is not always over nice when he arrives at his destination at night. The kangs are most comfortable bed places in cold weather; they are built of brick covered with a thick coating of mud, on the top of which is spread a mat; a fire lighted within soon heats it, and the fire being allowed to go out,

a moderate heat is kept up throughout the night, which is far from unpleasant in cold weather. Care must be taken not to light too large a fire, or the kang becomes unbearable, for once made hot, it will not cool for at least 16 hours.

To show the cost of travelling in Shantung, I will here give a copy of an hotel bill at Hwang hsien which can be taken as a very fair average throughout my journey.

Dinner for self consisting of—

1 dish pork	30	cash.
1 „ fowl	25	„
1 „ beef	80	„
1 „ cabbage	15	„
1 „ rice	30	„
3 „ pickles	25	„
	205	
Wine	40	cash.
Bread	30	„
Inn	250	„
Water	50	„
Food for 3 servants	542	„
Food for 3 ponies	460	„
Candles	100	„
	1,677	cash.

The noon day halt usually cost—

Breakfast for self of eggs, bread and vegetables (fish when I could get any, ...	120	„
Inn,...	50	„
Servants	125	„
Ponies	200	„
Total ...	2,172	cash.

Throughout my entire journey I met with the greatest possible civility from all, excepting the mandarins. These, with the two exceptions of the provincial judge at Tsinan foo and the representative of Confucius at Kiufow, treated me as a rule with the utmost indifference and discourtesy, and in some instances with absolute rudeness, although I was travelling in my official capacity.

The mercantile class were most civil, and in some of the large cities we passed through, influential merchants visited us and questioned us closely regarding railroads, steam-ships and foreign inventions generally, and many of them expressed a strong desire to see foreign improvements introduced into the country. Sometimes we stopped at cities where large fairs were being held, and where of course crowds of people from all parts had collected; by far the greater number of whom had probably not even heard of foreigners, much less seen them, but scarcely in a single instance did we hear an opprobious epithet applied towards us. Of course we were frequently much inconvenienced by the curiosity of these people who naturally crowded about us, but we were never once subjected to discourtesy of any sort.

ARTICLE II.

ON WÊN-CH'ANG, THE GOD OF LITERATURE, HIS HISTORY AND WORSHIP.

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AMONG the many deities created by the Chinese there is one who stands invested with peculiar interest, owing at once to the prominent place assigned to him in the national pantheon and in popular worship, and to the fact that in studying the development of this article in the Chinese creed, the gradual fusion of ancient nature-worship with more recent sacerdotal pretensions and an imported system of mythology may be traced with much distinctness.

More than one writer upon the social institutions of the Chinese has already noticed the worship that is paid to the God of Literature, and attention has been drawn to the remarkable and grotesque form in which this deity in one of his impersonations is commonly depicted. The records of Chinese literature itself have not however, been called upon as yet to afford a reason, on behalf of the worshippers of this deity, for "the faith that is in them;" and the result of such a task, now accomplished, will be presented in the following survey.

Wên Ti, 文帝 the God of Literature, otherwise denominated *Wên Ch'ang Ti Kiün,* 文昌帝君 is one of the canonical divinities to whom worship is officially addressed throughout the Empire of China, in conformity with Imperial ordinances. Twice in each year, viz., on the 3rd day of the 2nd month and again on some auspicious day specially chosen during the 8th month, sacrifice and invocations are offered before his altar in every city of the Empire; and the temples erected in his honour vie with those of Kwan-Ti, the God of War, in popular respect. Like the God of War, moreover—the deified warrior Kwan-Yü, whose fidelity and

martial prowess belonged to actual history before they became converted to mythological uses—the God of Literature represents at least in some degree a purely human original, and owes his divine personality to the system under which the pontiff-sovereign of China wields authority to invest spirits of departed mortals with divine attributes and powers. The God called into being by an Imperial mandate has at the same time become wholly interfused with traditional ideas of a date anterior to the patent of his creation; and the result of this mixture of immemorial legends with modern official apotheosis may be seen at any of his temples, in the double personification to which the God of Literature is subjected. The deity is represented under the form respectively of a dignified and venerable sage, and of a wild, unearthly figure, suggesting the idea of an excited demon rather than of a beneficent dweller among the celestial spheres. This dual representation gives a clue to the origin of the existing belief with respect to the supernatural patrons of literature and study.

A succinct account of the process by which the superstition in question has grown into shape is given in the work entitled *Wu Hio Luh*,* by Wu Yung-kwang, which was published in 1832. The statement there presented is as follows:—

"With regard to the worship of Wên-ch'ang, two versions of its derivation exist. According to one account, this deity is one of the Heavenly Gods. In the *T'ien Kwan Shu*† the following passage occurs.

"'The *Tow Kw'ei* 斗魁‡ upholds and embraces six stars. The first [of these] is *Shang-tsiang;* the second is *Ts'ze-tsiang;* the third is *Kwei-siang;* the fourth is *Sze-ming;* the fifth is *Sze-chung;* the sixth is *Sze-luh.*§ These constitute the palace of Wên-ch'ang.' From the foregoing passage first arose the designation Wên-chang.

"According to the other account, he is the disembodied spirit (*Kwei*) of a mortal. Under the Chow dynasty he existed as Chang Chung; under the Han as Chang Liang; during the Tsin dynasty as Lü Kwang, Prince of Liang; under the Five Dynasties as Mêng Hü, Ruler of Shuh; and during the age of the Yao

* 吾學錄 The author was formerly Viceroy of the Hukwang Province.

† The Book of Uranography in the *Sze Ki*. See below.

‡ The most prominent part of the constellation of Ursa Major, sometimes called "the Dipper."

§ See below.

family, who reigned under the title of the Ts'ing dynasty, as Chang Ngo-tsze, in whose honour a temple was erected at the Tszet'ung Mountain 梓潼山 (in modern Szech'wan). The Emperor Ming Hwang of the T'ang dynasty (circâ A. D. 745), when he made his journey to the West, conferred the retrospective title of *Assistant Minister of State* upon him; and the Emperor Hi Tsung (A. D. 874), when he retired to the province of Shuh, invested him with the title of *Shun Tsi Wang* 順濟王 (or Favouring and Assisting Prince). In the reign Hien P'ing of the Sung dynasty (A. D. 998) this title was converted into *Ying Hien Wang* 英顯王 (or Prince of Manifested Eminence). In the reign Yen Yeo of the Yüan dynasty (A. D. 1314) the title was additionally enlarged as follows: 輔元開化文昌司錄帝君 (Supporter of the dynasty of Yüan, diffuser of renovating influences, Sze-luh of Wênchang, God and Lord).

"This was the first introduction of the appellation "God" (*Tî*) in connection with the object of adoration.

"The above are the two different versions of this article of belief; and although it is impossible to say which of the two should be adopted, yet inasmuch as the deity is included in the sacrificial canon, he may be held to be the god who [governs] intelligence and establishes position. Accordingly, those who study to advance themselves in the profession of letters, and are aiming at academical honours, do right to reverence him."

In the above passage a somewhat curious resemblance may be traced between the calm indifference of the modern Chinese author, sceptical on the whole but still willing to be on the right side if possible, and the religious eclecticism which the Athenians manifested to St. Paul. It brings, indeed, vividly to mind that peculiarity in the temperament of the Chinese which has permitted religions to expand and multiply and faith to become extinct. The nature of the various constituents in the formula of belief which the author quoted from above thinks it prudent to hold in reverence must now be explained by means of further selections from Chinese literature.

Recourse may be had in the first place to the instructive Miscellanies of Chao Yi,* published about A. D. 1790, in which the following disquisition occurs under the heading *Wên Ch'ang Shên:*

* The *Kai Yü Tsung K'ao* 陔餘叢考 by Chao Yi 趙翼

"The object of worship now-a-days in the temples dedicated to Wên-ch'ang is Tsze T'ung Ti Kiün—the God of Tszet'ung. [After proceeding to quote from a writer named Wang Hi-chow a detailed account of the various metempsychoses from one human form to another through which the now deified spirit passed in ancient times, Chao Yi continues, still quoting the same authority] —he was reborn in the person of one named Chang of Yüeh Tsüan 越雋張氏 who, at the age of 73 secluded himself in a rocky cave. Here he attained to a knowledge of the mysteries of *Tao* (perfect wisdom), and became transformed [into one of the immortals]. His bodily form being changed, he went to Hienyang, and had a meeting with Yao Chang.* When the latter entered the Kingdom of Shuh, and reached the mountains of Tszet'ung, the divine being addressed him saying: My lord! return unto Ts'in! Ts'in has no ruler—it rests with thee, o my lord! On being asked his name he replied "Chang Ngo-tsze." At a later period Yao Chang erected on this spot a temple dedicated to Chang the Scholar 張相公廟 When Hi Tsung of the T'ang dynasty entered Shuh, the divine being again came forth and welcomed His Majesty, who, taking off his own girdle, bestowed it upon him; and again, on the day of his departure the Emperor endowed him with donations beyond number.

"The continuation of Ma Twan-lin's Encyclopædia also states on this subject: The God of Tszet'ung was Chang A-tsze, who was a servant of the Tsin 晉 dynasty, and was slain in battle. A temple was erected in his honour. During the T'ang dynasty, titles were conferred upon him (as already stated above). In the reign Hien P'ing, when rebellion was incited by Wang-kiün, on the advance of the Imperial troops against the insurgents, a man suddenly ascended a ladder and exclaimed, pointing in the enemy's direction: 'The God of Tszet'ung sends me here. On the 20th day of the 9th month the city shall fall, and ye shall be exterminated every one.' On the day named, the prophecy was fulfilled by the capture of the city; and on this being reported to His Majesty by the generalissimo in command, the title of the God was changed to *Ying Hien Wang*. The above is to be read

* Yao Chang 姚萇 originally a commander under the Tsin dynasty, rebelled in A.D. 384, and proclaimed himself Prince of Ts'in 秦王. He founded subsequently the posterior Ts'in dynasty, which held rule for some years in Western China.

in the sacrificial records; but still no connection with the idea of Wên-ch'ang shews itself. In the treatise on Rites and Ceremonies in the History of the Ming dynasty we find that in the reign Hung Che (A.D. 1488) the minister Chow Hung-mow and his colleagues made the following statement when settling the sacrificial canon: 'As regards the God of Tszet'ung the record states that the God was [in life] of the surname Chang, and was named Ngo-tsze. His abode was at the Ts'ikiüh mountains in Shuh. He served the dynasty of Tsin and was slain in battle, whereupon temples were erected in his honour. During the T'ang and Sung dynasties he was successively invested with titles, culminating in that of *Ying Hien Wang*. The Taoist sect speak of the God as 'ruler of Tszet'ung and comptroller of the abode of Wên-ch'ang, and of written documents among men.' On these grounds the appellation *Ti Kiün* (God and ruler, or lord) was added by the Yüan dynasty, and fanes have been erected for his worship in colleges in various parts of the empire. In the reign King Tai (A.D. 1450) his temple at the capital was rebuilt, being in a decayed condition; and every year, on the birthday of the God, the 3rd day of the 2nd moon, officials are sent to offer sacrifices there. But the manifestations of supernatural power on the part of Tszet'ung took place in the kingdom of Shuh; and it is fitting that his temple should derive its support from that locality itself. The six stars of Wên-ch'ang have no connection whatever with this god; and a decree should be issued discontinuing [the worship at Peking].'

"The continuation of the Antiquarian Researches (Ma Twan-lin's work) further states that in the reign Kia Tsing (A.D. 1522) Ni Wên-yi, in his memorial requesting that the sacrificial canon be reformed, held language based on that of Chow Hung-mow. He observed that 'it was not until the reign King Tai that an Imperial mandate conferred [the title] *Wên Ch'ang Kung* upon the God. His worship ought to be conducted in Shuh, and it is not fitting that a State Temple be dedicated to him at the capital. The star Wên-ch'ang has nothing to do with the God, and the combination of the two in one which has now taken place must be ascribed to a wilful confusion of ideas.'"

The extracts set forth above abundantly prove the lack of connection, in early times, between the deified recluse of Tszet'ung and any astronomical notions respecting a celestial patron of literature; and these latter now demand attention, as the second of the two branches into which the subject in hand is divided. It has

already been noticed that the designation *Wên Ch'ang* is derived from stars forming part of the constellation of Ursa Major; but what is the link that binds the God of Literature to these special luminaries? For an answer to this question another Chinese writer must be consulted. Ku Yen-wu, one of the most erudite scholars of the seventeenth century, has devoted a page or two to the subject in his Miscellanies, entitled *Jih Che Luh* 日知錄, where we read as follows:

"The period from which the worship at present offered to *Kw'ei Sing* 魁星 (the star *Kw'ei*) takes its rise, is not known. On the assumption that the constellation *Kw'ei* 奎* is the God of Literature 爲文章之帝 temples have been dedicated and worship offered thereto; but, for the reason that no bodily image could be assigned for *Kw'ei* 奎, this character was exchanged for *Kw'ei* 魁. Yet for the latter, again, no bodily image could be delineated, wherefore the form of the writen word itself was taken, and represented as a *Kwei* 鬼 (disembodied spirit, ghost, δχιμων), with its foot upraised, and bearing aloft its [remaining constituent part] *Tow* 斗 (the "bushel" or measure: see the character *Kw'ei* above). But in doing this it was forgotten that *Kw'ei* 奎 is one of the seven constellations of the Sombre Warrior (the northern quadrant of the zodiac), whilst *Kw'ei* 魁 is the first of the stars composing the constellation *Peh Tow* 北斗 (the "North Bushel"=Ursa Major). The two celestial bodies govern respectively influences of different kinds; and of the written characters themselves the pronunciation (tone) is not the same. Can it be right that in the modern worship addressed to arts and letters, the object of adoration should be placed in *Kw'ei* 魁 and not in *Kw'ei* 奎? Are, then, those who succeed as candidates at the examinations ignorant of the very rudiments of language?

"It may be observed, in addition, that, according to modern usage the five highest names on the examination lists are called the Five Kw'ei 五魁; and in the books of the *Historical Records* entitled *Kuh Li Chwan* and *Yeo Hia Chwan* a similar usage of the character occurs. Yen Sze-ku, in his Commentaries on the *Historical Records* says that what is called *Kw'ei* is the *receptacular* (*i. e.* the square) portion of the constellation of the Great Bear, and is the base (or primary portion) of the three stars called *piao* 杓 or the "handle." (In the science of uranography, *Kw'ei* 魁

* This Chinese constellation or mansion corresponds with sixteen stars in Andromeda and Pisces.

is represented as the *head* of the *peh tow* constellation, and the *rear* is called *piao*. Hwai-nan Tsze, in his *Explanation of the constellation Tow*, states that from star No. 1 to star No. 4 is called *Kw'ei*, and stars No. 5 to No. 7 are called *piao*).* Hence anything of a fundamental or primary character is spoken of as *Kw'ei*."

We have now arrived, by means of Ku Yen-wu's elucidation, at a reason for the worship of *Kw'ei*, or part of the constellation of Ursa Major, as the representative of the celestial patron of literature and sudy. How or at what period the feeling of veneration first took its present concrete shape, we must be content to leave, on Ku Yen-wu's authority, an unsettled question; but it is possible, nevertheless, to trace the superstitious belief in some controlling influence emanating from the stars of Ursa Major to its earliest appearance in literary records, and for this purpose we may refer to the venerable treatise on Uranography which we have from the hand of the Chinese Father of History, Sze-ma Ts'ien (B.C. 100). Before proceeding, however, to quote from this work the passages relating to *Peh Tow*, a few lines in connection with the same subject may be extracted from the highly instructive Appendix on the Astronomy of the Chinese, by the Rev. J. Chalmers, A.M., which forms part of the prolegomena to Dr. Legge's *Shoo King*, (Chinese Classics, Vol. III, part I). At page 93 the following passage occurs:

"A very ancient and characteristic method of determining the seasons and months of the year, to which the Chinese are fond of alluding, was by the revolution of Ursa Major. One of its names, of which it has several, is 'the Northern Bushel.' Under this name it is often confounded with the North Pole, and also with one of the 28 mansions, in Sagittarius, which has the same name. Its tail is called 'the handle.'"

The idea referred to in Mr. Chalmers' statement will be recognised in the language of the extract about to be translated from the *T'ien Kwan Shu* of Sze-ma Ts'ien. From this and other ancient treatises it is evident that in very remote ages the science of uranography was assiduously cultivated among the Chinese, for both astronomical and soothsaying purposes. The hereditary office of Historian, which was held by Sze-ma Ts'ien under the reign of Wu Ti of the Han dynasty, was developed, indeed, from that of

* The paragaph given within brackets is printed by the Chinese author as a marginal note.

the earlier hereditary astrologers; and it is not surprising, therefore, to find an elaborate and fantastic catalogue of mystic powers attributed in his work to the various stars of the firmament. The following extract from the *T'ien Kwan Shu* will justify the prominence assigned in Chinese superstition to the constellation of Ursa Major.*

"*Tow* 斗 *is the chariot of Ti* (sc. the God of Heaven as known to the ancient Chinese). *It revolves in the central sphere.*

"The So-yin Commentary† says: According to Sung-kiün's interpretation, quoted by Yao Sze-lien, this statement means that the great God rides in the chariot and makes the watchful circuit [of the Heavens]. Hence nothing escapes his ordering.

"*It looks down and governs the four divisions* [*of the Empire*]; *it separates light from darkness*; *it regulates the five elements; it effects changes in government; it sets up every kind of order. Upon the Tow depend all these matters. The Kw'ei* [portion] of the *Tow upholds and embraces six stars, which are called Wên-ch'ang Kung* 文昌宮.

"The So-yin Commentary says as follows: Wên Yao-kow says: 'Wên-ch'ang Kung is the store-house (or palace, *Fu*, 府) of Heaven.' The *Hiao King Yüan Shên K'i* (an ancient version of the Treatise on Filial Duties, with notes of a mystical character), states that *Wên* 文 signifies the place where cosmic essence *(tsing* 精) is congregated; and *Ch'ang* 昌 means to spread abroad the arrangements of Heaven. That which upholds and that which opposes dwell together, and thus are rendered perfect the forms *(simulacra)* of Heaven.‡ Hence the name of *Wên-ch'ang Kung* is given.'

"*The first* [*star*] *is called Shang-tsiang; the second Tsze-tsiang; the third Kwei-siang; the fourth Sze-ming; the fifth Szé-chung; the sixth Sze-luh.* §

* In the translation given above, the text of the *T'ien Kwan Shu* itself will be represented in italic type, to distinguish it from the wording of the notes intercalated by successive commentators. The edition of the *Sze Ki* used is that of Ch'ên Tsze-lung, 陳子龍, dating from A.D. 1640.

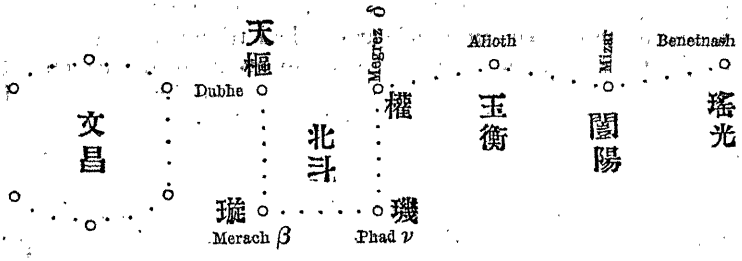
† By Sze-ma Chêng, a writer of the 9th century A.D., who made the *Sze Ki* or Historical Records his peculiar study. His Commentary is the standard authority on the subject.

‡ The following is the original text of this passage, which has been translated as it stands, without any attempt to elucidate its meaning—an apparently hopeless task: 文者精所聚昌者揚天紀輔拂並居以成天象

§ 1. 上將 2. 次將 3. 貴相 4. 司命 5. 司中 6. 司祿

"The *Ch'un-ts'iu Yüan Ming Pao* has the following remark in connection with the above: '*Shang-tsiang* establishes authority and martial prowess; *Ts'ze-tsiang* rectifies that which [stands to] right and left; *Kwei-siang* governs the compilations of literature; *Sze-luh* rewards merit and *gives advancement to scholars*; *Sze-ming* presides over calamities and chastisements; and *Sze-chung* presides over the assistants in government.'"

Enough has been quoted in the foregoing passages to make it clear that in the earliest Chinese speculation on the nature of the heavenly bodies a special importance and functions of a controlling nature were ascribed to the stars composing the "bushel" or "ladle" in the constellation of Ursa Major. That the degree of awe with which these stars were anciently regarded sprang originally from the clock-like regularity of their movements around the pole of the Heavens, may be inferred from the remarks on the subject contained in Mr. Chalmers' treatise, already quoted from above; and inasmuch as the sphere encircling the pole has ever been regarded as the abode of the supreme ruler of the Heavens, it was not unnatural that the most prominent luminary within this mystic circle should become gradually invested with attributes of majestic importance. In order more clearly to illustrate the theories of the Chinese on this point, the following diagram exhibiting the constellations above referred to is appended, shewing the Chinese designations for each star, together with the signs affixed in European astronomy to the respective portions of Ursa Major:



Much might be written in respect of the various conflicting statements regarding the stars and their properties to be found in the ancient treatises on astrology. The *Sing King* 星經, a work which in its present form, indeed, is not allowed by critics a higher age than that of the seventh or eighth century A. D., but which is probably based upon an older original, gives an

entirely different account of the influences emanating from the *Peh Tow* and *Wên Ch'ang* to that supported by the authority of Sze-ma Ts'ien, and affords no grounds for claiming on behalf of the last named constellation the special patronage of arts and letters; but this collision of authorities need not be discussed in detail here, and may be dismissed with the observation that it seems incidentally to attest the foreign origin of much if not the greater part of the astronomy and astrology of the Chinese. Different lands and rival schools have probably contributed the basis of Chinese science in this respect; and that confusion in nomenclature and ideas should be the result will not appear surprising. What is most material to note is that so early as the century preceding the commencement of the Christian era a belief in the influence over study and its results exercised by a part of the constellation known to ourselves as Ursa Major was entertained in China. From such a belief to the introduction of a concrete form of worship but one step was necessary; and this step was facilitated, there can be little doubt, by the torrent of Indian customs and mythological ideas which invaded China shortly before the birth of Christ. Under the influence of these exotic revelations the dreams of Chinese philosophers respecting mind and matter appear to have become enlarged, to have drawn into harmony with the objective tendency of Indian thought, and to have passed eventually, by a natural process of degradation, into the mixture of idolatry, soothsaying, and Rosicrucianism which has become popularly known as the Taoist religion. The doctors of this belief, which in the first centuries of our era had triumphant possession of the Chinese mind, were not slow to profit by the lessons of Buddhism, so soon as the legends bequeathed by Shakyamuni and his disciples made their way into China; and among the tenets thus transplanted there was none that agreed more closely with indigenous notions than the Buddhist legend which represents the stars as forming the abodes of various orders of celestial beings.* The astrological speculations of early mystics required nothing

* Thus, in the *Fa Yüan Chu Lin*, the great Chinese encyclopædia of Buddhism (as quoted in the *Kih Che King Yüan* 格知鏡原), the following passage occurs: "According to the esoteric writings, all these stars and constellations are the palaces and mansions of the *Devas*, where they dwell in great glory. Returning favour to those who are stirred with reverence towards them, their beneficent power is brightly manifested."

but this hint to become transformed into a system of material worship; and we find accordingly in the Taoist idolatry of the present day an inextricable confusion of the natural philosophy constructed by the ancient Chinese sages with the grosser materialism introduced by votaries of the Hindoo pantheon. No evidence exists, as Ku Yen-wu has admitted, to prove the period when a bodily likeness was first designed for the patron of literature throned among the stars; but whatever may have been the time when this addition was made to the category of popular divinities, the device of combining his personality with that of the deified mortal canonized as the God of Tszet'ung was essentially a Taoist trick. The thaumaturgic reputation assigned to the spirit of Chang Ngo-tsze was confined for centuries, it is evident, to the valleys of Szech'wan, until at some period antecedent to the reign of Yen-yeo, in A. D. 1314, a combination was arranged between the functions of the local God and those of the stellar patron of literature. As has been already seen above, Imperial sanction was obtained for this stroke of priestly cunning; and notwithstanding protests continually repeated by orthodox sticklers for accuracy in the religious canon, the composite deity has maintained his claims intact, and an inseparable connection between the God of Literature created by Imperial patent and the spirit lodged among the stars of Ursa Major is fully recognized in the State ceremonial of the present day.

The modern form of worship addressed to the God of Literature may be discussed in a few concluding lines. As has been stated already, a temple dedicated to this divinity by the State exists in every city of the empire, beside others erected as private benefactions or speculations, in which, as a general rule, *Wên Tî* the patron of study, is worshipped in conjunction with *Wu Tî*, the God who favours the profession of arms. Wherever *Wên Tî* is worshipped, there will also be found a separate representation of *Kw'ei Sing*, shewing that while the official deity has been allowed to "borrow glory" from the popular God, and even to assume his personality, the independent existence of the stellar spirit is nevertheless sedulously maintained. The place of the latter in the Heavens above is invariably symbolized by the lodgement of his idol in an upper storey or tower, known as *Kw'ei Sing Koh* or *Kw'ei Sing Low* 魁星閣—樓 These buildings are also often to be found separately, having no connection with the temples of the official deity, and in such cases are either attended by Taoist

fortune-tellers who make a livelihood from the fees accruing at the altar, or else form part of the numerous private halls of study (*Shu Yüan*) connected with preparations for the Literary Examinations which abound in every Chinese city. The students who assemble here at stated intervals have thus the means at hand of worshipping the patron of their profession and of conciliating his favour with incense and prayers. Thus it is evident to how great a degree the ancient stellar divinity still emphatically monopolizes the popular idea of a guardian assigned to literature and study, notwithstanding that the deified recluse of Tszet'ung has been added in this capacity to the State pantheon for upwards of five hundred years.

A visit to one of the official temples dedicated to Wên Ti affords the best mean for studying the forms under which the God is worshipped. In the main hall of the building a shrine and altar will be found arranged in the manner common to temples of every description in China. The interior of the shrine is occupied by a venerable figure, seated in calm and dignified repose, a benign expression manifested in the gilded features, and a flowing beard descending to the lap upon which the hands lie folded. In front stand the narrow perpendicular tablets, set in deep frameworks of elaborate carving, which indicate the titles of the object of worship. In the present instance these tablets are three in number, and bear the following inscriptions:

No. 1 (centre). 九天開化文昌梓潼帝君神位

(The spiritual abode of *Wên Ch'ang*, God and Lord [of] Tszet'ung, who, from the Nine Heavens, spreads abroad renovating influences).

No. 2 (left). 九天宣化文昌魁斗星君神位

(The spiritual abode of the Stellar Lord, *Wên Ch'ang* and Kw'ei Tow, who from the Nine Heavens promulgates renovating influences).

No. 3 (right). 九天揚化文昌金甲神君神位

(The spiritual abode of the Spirit Lord *Wên Ch'ang*, clad in golden mail, who from the Nine Heavens uplifts renovating influences).

The title ascribed in the principal tablet to the object of worship indicates very significantly the fusion that has been effected between the God of Tszet'ung and the star-spirit of Ursa Major; but we nevertheless find the separate individuality of Kw'ei Sing plainly recognized. The necessary triad is rendered complete by

the addition of a further object of worship, whom the popular superstition represents as the martial apparitor attached to the two principal persons of the trinity. The idea of increasing the total of separate members of this godhead to the mystic number three is undoubtedly Buddhistic in its origin, as is also the title conferred upon the "golden-armoured" spirit, in imitation of the attributes ascribed in Hindoo mythology to Indra's celestial champions.

Passing now to the separate representation of Kw'ei-sing as an independent deity—the image must be sought in an upper storey of the building, the ground-floor of which is frequently used by some local pedagogue as a school. The image of the popular divinity will be found enshrined before a plain altar, with less pomp and ornament than is bestowed *secundum artem* on the official God below. Kw'ei Sing is ordinarily represented by a gilded figure of four or five feet in height, clothed only about the waist, and shewing the distorted features, shaggy eye-brows, and projecting teeth which are commonly attributed to the likenesses of *Kwei* or disembodied spirits. The figure stands poised by the left foot upon the head (only) of a dragon; whilst the right leg is vigorously drawn up with the foot projecting backwards.* To his right shoulder is attached an object representing the *tow* or measure, having the well-known form (the lower *frustum* of a pyramid) in which this vessel is constructed. His left hand is shewn grasping one of the two curved pieces of light wood which are used in the process of divination; whilst in his right hand, brandished aloft, a pencil is seen to be waved. Such is the figure to which the calculating worship of Chinese students is addressed: a deity manufactured from two obscure allusions in a half-understood astrological catalogue and symbolized by means of a vulgar verbal analysis.

In order to omit nothing of consequence that can be found bearing upon the history of this superstition, the survey that has been undertaken may be concluded with the following rendering of the prayer or invocation which is offered before the shrine of Wên Ti on the days of official worship. Twice during each year, as already stated above, a representative of the Emperor burns incense and offers sacrifices to the God of Literature, and on such occasions the following invocation is read by the proper functionary in attendance:

* See Ku Yen-wu's account of the bodily representation of Kw'ei-sing, above.

"On this——day of the——moon in the year———, the Emperor despatches his officer named———to offer sacrifice unto the God Wên-ch'ang and to say:—O Divine Being! Thou who didst manifest thy presence at Tung in the western region; whose [star the] pivot [of the firmament] doth make the circuit of the northern pole; who shinest brightly in the six-fold constellation; who orderest the splendour of auspicious fates:

From generation to generation Thou hast sent thy miraculous influence down upon earth. Thou hast been the lord and governor of learning among men. In upholding that which is right, long hast Thou brightly shone and stirred up hearts to thankfulness. It is meet that a tribute of reverence and worship be paid with sweet-scented offerings. Now therefore at this period of mid-spring (or mid-autumn) it behoves us to fulfil the season's adoration. May the fumes of this sacrifice and the order thereof be acceptable unto Thee! Look down, we beseech Thee, on our devotion and our humility!"

The text of the above invocation was established by order of the Emperor Kia-k'ing, in 1801.

ARTICLE III.

THE FABULOUS SOURCE OF THE HOANG-HO.

By E. J. EITEL, Esq.

DURING the controversy which some years ago agitated the minds of all the eminent geographers of Europe, on account of the assertions made by several African travellers that the primitive source of the Nile was to be found either in the Nyanza or in the Njassi lake, it was a favorite argument with the opponents of those explorers, that no large river in the whole world was known to take its rise from a lake. Though this argument is logically considered as futile as the attempt to prove from the fact of the sun having risen every day since the world stood that it must rise to-morrow, yet the impression generally remained, that the whole geographical world of the West considered it *a priori* highly improbable that any large river should take its first rise in a lake.

In direct opposition to this view stands out the idea which pervades the principal religions of the East, Brahminism and Buddhism, that all the larger rivers of the world issue from one sacred lake situated on the northern slope of the Himâlaya. When Buddhism spread over China it was but natural that Chinese Buddhists should believe their own great national river the Hoang-ho to be likewise connected with that central lake as its primitive source. But there was one great difficulty in the way: the sources of the Hoang-ho were known to be at an immense distance from the Himâlaya mountains. Buddhism has however its Jesuits too and it may be interesting to observe, how they managed to overcome this difficulty, how they contrived to establish a connection between the great sacred lake of the Himâlaya and the known sources of the Hoang-ho and thus smuggled the latter in among the number of sacred rivers. With this end in view I

will take a leaf out of a Chinese Buddhistic geography and transcribe it with the help of other Chinese works freely but faithfully and impartially.

It is the common belief of all Buddhistic nations that there is a large lake on the northern slope of the Himâlaya and that this lake is the common source of all the sacred rivers of the world. Chinese works give the additional information that this lake is situated on the plateau of a mountain (准經香山) which I am however unable to identify with any of the known peaks of the Himâlaya. The name of the lake itself as the Chinese give it 阿耨婆達多 or 阿那槃答多 or 阿耨達 or 阿那達 or 阿耨池 is simply a phonetic transliteration of the Sanskrit term *Anavatapta* (Pâli *Anôtatthâ*) and the Chinese commentators explain the etymological meaning of this name in perfect accordance with the results of European philology. *Anavatapta* they say is the name of a lake "which is without heat or excitement" (無熱惱池), and E. Burnouf a Sanskrit scholar of high repute independently explains the same term by "un lac qui n'est pas éclairé ou échauffé (par les rayons du soleil)." Singhalese and Mongolian Buddhists, all know and reverence this same sacred lake, the former calling it *Anótatta* the latter *Mapam dalai*. All Buddhists likewise agree in the assertion that this lake forms a nearly perfect square, that it measures about 50 Yodshanas in circumference, that its bottom is covered with diamonds, that 4 large rivers, the Shîtâ, Ganga, Sindhu and Vakohu have their rise there and that each of them takes a turn round the lake before settling on its final course. There is however some divergency and confusion about the names of the several embouchures through which those rivers come forth. According to one account there is an outlet in the eastern side of the lake shaped like the mouth of a lion and therefore called the mouth of the diamond lion (金剛獅子口) sending forth a river called Shîtâ. A similar outlet in the southern bank of the lake called the mouth of the silver cow (銀牛口) sends forth the Gañgâ. Through a third opening in the West called the mouth of the golden elephant (金象口) issues the Sindhu and through a fourth embouchure called the mouth of the glass horse (瑠璃馬口) and situated on the northern side of the lake passes the Vakohu. I believe this account to be more correct than others diverging from it because it is at least in one point confirmed by ancient Hindoo mythology according to which the Ganges springs from a fissure in the earth called Gômukhî *i. e.* the mouth of a cow.

All the Chinese accounts still extant contradict each other as to the names of those outlets and their relative geographical position.

As to the lake itself there can be no doubt about its being identical with the sacred lake of the Brahmans called Manasarovara, the situation of which Hamilton's Hindustan* gives as Lat. 31° N. Long. 81° E. Some of the details which Hamilton gives of this lake tally in a remarkable manner with the above given Chinese description though they are based on the reports of European travellers. "It is bounded on the South by the great Himâlaya range, on the East by a prolongation of the Cailas ridge and on the North and West by very high land; under the forms of a mountain, a table, a ravine and a slope all declining towards the lake. It appears to be of an oblong shape having the East, West and South sides nearly straight. The angles are not sharp, if they were, its figure would be nearly square. Mr. Moorcroft considered it certain that the Manasarovara sends out no river to the South, North or West. His stay however was too short to allow of his making a complete circuit of it; but adverting to the difficulty of supposing the evaporation of the lake's surface in so cold a climate to be equivalent to the influx of water from the surrounding mountains during the season of thaw, it may still be conjectured, that although no river run from it, not any outlet appeared at the level at which it was seen by Mr. Moorcroft, it may have some drain for its superfluous waters when more swollen and at its greatest elevation perhaps communicates with Lake Rawan (in which the Sutuleje has its source), conformably to the oral information received from native travellers."

So far Hamilton. When sober European travellers notice four mountains around the lake, the shape of which reminded them of "a mountain, a table, a ravine and a slope," it is easily seen how the fiery imagination of Asiatic pilgrims could come to discern there the head of "a lion, a cow, an elephant and a horse." Hamilton might have added with perfect truth that on the mountains surrounding the lake lie within a short radius the sources of four large rivers, the Brahmaputra in the East, the Ganges in the South, the Indus in the West and the Oxus in the North. But it is exactly the same idea when the flowery language of Asiatic geographers says "to the East of the lake there is the

* A geographical, statistical and historical description of Hindostan and the adjacent countries by W. Hamilton. London 1820.

head of a lion spitting out a mighty stream the Shîtâ, in the South there is a cow from the mouth of which issues the Gañgâ, in the West of the lake there passes the Sindhu out of the mouth of an elephant, whilst in the North the mouth of a horse sends forth the Vakohu." To the devout worshipper of the sacred lake it matters little, whether those four rivers proceed directly out of the lake or from the mountains surrounding it.

Another explanation would be to suppose that the Chinese account confounds or identifies the Manasarovara (Anavatapta) with the Roodh lake, as it is the latter only that sends forth at least one large river a tributary of the Indus. This supposition appears the more likely, as the ancient mythology of the Hindoos actually identifies the two lakes, which as Hamilton himself suggests intercommunicate perhaps at certain seasons of the year. On the other hand it accounts for only one river and we should still have to recur to the hypothesis that the Asiatic traveller not over punctilious as regards topographical accuracy jumps to the conclusion that three other large rivers the sources of which were known to be near the lake rise from the sacred lake itself. I may add here, that I have met in a Chinese text with the modern form for the ancient Anavatapta *i. e.* with the name Mânasa (摩那斯) and the explanation which is added there (意流出) produced by the mind *i. e.* of Brahma is philologically more correct than that which Hamilton gives who writes Mana (holy) sarovara (lake). The correct form is Mânasa (mindborn) sarovara (lake).

But it is time now to direct our attention to the four rivers in question. I will begin with the alleged southern outflux of the lake with the Gañgâ (Ganges). The Chinese call it 恒伽 or 恒河 or 强伽 or 殑伽 or 競伽河. The derivation of the Sanskrit term gañgâ from gâm-gâ *i. e.* gone to the earth is preserved in the Chinese explanation which says of the Ganges with reference to the Anavatapta lake "it came thither from heaven's halls." Some Chinese texts advert also to the story of the Ganges flowing from the head of Shîva (see Râmâjana I, 44, 47) in the following words: "heretical books assert that the Ganges streamed forth from the centre of Mahêshvara's ear and dropped thus from heaven to earth where it altered its form of appearance on the top of the Himâlaya mountains." It is to be noted that Mahêshvara (魔醯首羅) is the name under which Shîva is usually quoted in Chinese books. The Chinese traveller Hiuen-tsang reports that "the Ganges is called by the natives Mahâbhadra (福水 lucky water)

because it washes off crime and guilt and if a man is thrown in when dying he will not be reborn in any of the lower spheres of transmigration." In accordance with the above mentioned assertion that the Ganges flows out of the Anavatapta lake through an opening resembling the mouth of a silver cow it is also reported that the bed of the Ganges is very rich in silver.

The next river is the Sindhu or Indus (信度 or 辛頭) which is believed to come out of the sacred lake through an outlet called the mouth of the golden elephant. In reality it is but a tributary of the Indus the Shatadru that rises in the Boodh lake, whilst the sources of the Indus itself are found to the North-west of the lake though at no great distance from it. The word Sindhu is explained by the Chinese as signifying 驗河 "the river of verification," an explanation which does not agree with the etymology of the Sanskrit term as the latter simply means "a river." The Sindhu is said to flow into the western ocean.

The third river the Vakshu or Oxus 縛芻 or 博叉 or 簿叉 or 婆叉河 is explained by 青河 "azure river." This is however most probably a mistake of the copyist for 清河 "pure river," which is the original meaning of the Sanskrit term. This river is said to flow out of the Anavatapta lake through a channel in the North whilst it actually rises in a different lake the Sir-i-kul on the plateau of Pamir, and we shall presently see how dexterously this circumstance has been made use of to assume the identity of the Sir-i-kul with the Anavatapta lake and to deduce from this an argument in favour of the place which was claimed for the Hoang-ho among the sacred rivers. The Oxus is reported to flow in a westerly direction through Persia and the adjacent country called Fo-ling (佛林) until it mingles with the northern ocean (*i. e.* the Aral sea).

The fourth river the Shîtâ (私多 or 悉陁 or 私陁 or 徙多 correctly explained by 冷河 "cold river" is said to issue from the eastern side of the Anavatapta lake through an opening resembling a diamond lion. Having flowed like the other three rivers once round the lake it is believed to lose itself in the earth and after passing through a subterranean channel it is asserted to reappear again on the Ashmakûta mountains (積石山) as the source of the Chinese river Hoang-ho and to flow into the eastern ocean. The assertion that the Shîtâ flows out of the eastern side of the lake is confirmed by the Purânas which distinctly and uniformly place the source of the Shîtâ in the East. This is

important because Hiuen-tsang and his followers assert for reasons of their own that the Shîtâ rises to the North of the sacred lake.

Here we have then the connection between the Hoang-ho and the sacred lake of the Buddhists established. But no doubt this connection looked rather arbitrary and artificial betraying its doubtful character by the absence of reliable topographical data. Where does the river lose itself in the earth? What proof is there of the existence of a subterranean channel? This was no doubt felt a serious difficulty and consequently the famous Chinese traveller Hiuen-tsang who penetrated central Asia about 650 A. D. improved upon the trick with the aid of his vast geographical knowledge. He identified the Anavatapta of ancient mythology with the lake Sir-i-kul situated on the plateau of Pamir (波謎羅). Lassen places this lake under Lat. 37° 27 N. and Long. 91° 19, 36 E. The Sir-i-kul is indeed the source of the Oxus and round about it there are the sources of several other rivers. One of the latter the Yarkand daria or Tarim gool Hiuen-tsang now declared to be the ancient Shîtâ. Of this river he moreover says—and granting that it is the Shîtâ he is quite correct in saying—that it flows into lake Lop (鹽海 the salt sea). Thence the river is believed to flow on hiding itself for some distance under the sands of the desert of Gobi which is for this reason called "sand river" (沙河) until it reappears again on the surface at the foot of the Ashmakûta mountains (積石山) at the eastern boundary of the desert under the name Hoang-ho. However forced this connection between lake Lop and the known sources of the Hoang-ho may appear to us it recommends itself at once to a Chinaman who is accustomed to look upon the desert of Gobi as the sandy channel of a river (沙河) and sees therefore no objection to its being called an outflux of lake Lop and a connecting link between this lake and the sources of the Hoang-ho which lie at the very borders of the desert. The Hoang-ho is therefore believed to draw its waters from the sand river; the latter comes out of lake Lop, which being in its turn fed by the Shîtâ has for its primary source the immediate precincts of the sacred lake on the plateau of Pamir *i. e.* the Anavatapta: *quod erat demonstrandum!*

This theory of Hiuen-tsang's is however based on the hypothesis that the Sir-i-kul is identical with the Anavatapta lake, an hypothesis which is not altogether without reasons. Though the identification of the Mânasa sarovara with the Anavatapta lake rests, as I believe to have shown, on very good grounds, it is open

to objections. Hiuen-tsang never came near the Mânasa lake but he did cross the plateau of Pamir. There he was correctly informed that the Oxus (Vahohu) comes out of the Sir-i-kul and not out of the Mânasa lake, he also knew that the plateau of Pamir is as much a centre round which the sources of great rivers lie as the Mânasa sarovara, and thus he was reduced to think that the Anavatapta lake is the Sir-i-kul. But having once adopted this view he was of course obliged to deviate from the above given Chinese accounts which place the source of the Shîtâ in the East, that of the Ganges South, that of the Indus West and that of the Oxus North of the lake. For he knew well enough that the Oxus flows out of the western side of the Sir-i-kul, he also knew that the sources of the Ganges could not well be said to lie South of that lake. Thus it came that Hiuen-tsang and all modern Chinese Buddhistic geographies make the Ganges flow out of the Anavatapta in the East, the Indus in the South, the Oxus in the West and the Shîtâ in the North. He was thereby enabled to identify the latter river with the Yorkand daria and to trace its continuation to the sources of the Hoang-ho.

There is no need for any further comment. The whole chain of argumentation by which Hiuen-tsang means to prove the claim of the Hoangho to be counted as one of the sacred rivers is no better than a rope of sand. The substitution of the "sand river" with its subterranean channel of water for the desert of Goby condemns itself. The artificial identification of the Sir-i-kul with the Anavatapta lake and the substitution of the plateau of Pamir for the sacred Himâlaya is likewise inadmissible. But it is obvious that the whole theory is a *pia fraus*. It is simply a sacrifice offered by Jesuitical bigotry to the national vanity of Chinese Buddhists who must needs have the title of a "sacred river" bestowed upon their Hoang-ho. What matters it then if this sacrifice is as unsubstantial as all that the Chinese offer to their gods, got up indeed with much ingeniousness, showy and hollow, and essentially but so much waste paper?

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ARTICLE IV.

SUR LES INSTITUTIONS DE CRÉDIT EN CHINE.

PAR MONS. G. EUG. SIMON.
Consul de France à Fou-Tcheou.

I.

UN des faits qui m'ont paru les plus étonnants en Chine, c'est assurément l'incommodité que présente la monnaie, et d'abord je ne l'ai considéré que comme une des nombreuses singularités qui distinguent le peuple Chinois et comme une nouvelle preuve de l'espèce d'incapacité qui me semblait alors empêcher de suivre ses propres innovations jusqu'à leurs dernières conséquences. Je ne tardai cependant pas à abandonner cette manière de voir; elle était inconciliable avec l'empressement très remarquable avec lequel les Chinois adoptent, dans les ports ouverts aux Européens les monnaies d'argent frappées, et en particulier la piastre Méxicaine et le Carolus.

Rien en effet me disais-je ne les empêcherait s'ils le voulaient de se créer une monnaie d'argent semblable à la notre qu'ils apprécient tant, et leur abstention doit être fondée sur quelque motif supérieur. Ensuite comment était il possible de supposer qu'un Empereur assez philosophe, assez économiste pour concevoir l'utilité d'une monnaie, (Hoang-Ti, 2,600 ans avant J. C.) ne se fut décidé qu'au hazard à n'en créer qu'une, et à choisir le métal le plus incommode par son poids. Le fer?

Mais avant d'aller plus loin, que l'on me permette de rappeler en quelques mots en quoi consiste le système monétaire de la Chine; je m'aiderai beaucoup, je commence par le déclarer, des recherches d'un ancien Jésuite qui a étudié la Chine comme il serait bien à désirer que l'on se mit à le faire maintenant.

"Le cuivre et l'argent dit-il sont en Chine les seuls signes publics de la valeur des choses et les seuls gages ou instruments des échanges, mais l'un et l'autre d'une manière très differente.

"Et en effet tandis que le cuivre qui a remplacé le fer aujourd'hui est mis en monnaie d'une forme, et d'un poids qui ont bien varié depuis sa création, mais aujourd'hui ronde et pesant chacune ——— et frappée au coin de l'Etat, l'argent reste en lingots que l'on échange d'après son titre et sa rareté contre cette monnaie de cuivre que les Européens appellent *Sapèques* et par conséquent n'est réellement pas *monnaie*. C'est à la sapèque seule qu'appartient l'unité monétaire, et les piastres dont le cours est ainsi que je le disais si facilement accepté, n'ont que le cours d'une valeur relative et variable comme la valeur respective du cuivre et de l'argent." Quant au Taël* ce n'est, ainsi qu'on le sait du reste, que l'indication d'un poids equivalent à une once Chinoise ou à 37 G. 796 D. d'argent, et lorsqu'on la vérifie pour le poids, il faut encore le verifier pour le titre car il y a de l'argent pur, sans alliage; celui qu'on appelle Hai-Kouan, et avec lequel le Gouvernement effectue ses paiements, et celui du commerce qui varie entre 3 et 11. 12 % d'alliage. On pressent dès lors la necessité que l'unité monetaire, la sapèque, offre toutes les garanties nécessaires de fixité et d'unité,† et à cet effet le Gouvernement qui s'est reservé la fabrication des sapèques, ne frappe que des sapèques sans alliage, et ne fait aucun bénéfice sur le coin, de sorte que quand il arrive que le cuivre dépasse en valeur celle de la sapèque le Gouvernement perd à en fabriquer, mais il s'en dedommage en se reservant aussi la propriété de l'exploitation des mines monopole qui lui permet de faire baisser la valeur du cuivre en faisant tout d'un coup sortir une grande quantité. Il peut de même en amener la hausse en tolérant la fonte des sapèques pour en mettre le cuivre en œuvre, ce qui est défendu par la loi aux particuliers.‡ Ce système monétaire est sans doute sujet à bien des inconvénients

* Taël n'est pas un mot d'origine Chinoise et a été sans doute apporté par les Européens.

† La forme et le poids des sapèques peuvent bien entendu varier suivant les provinces où elles sont frappées, mais cela ne change rien à leur rapport de valeur.

‡ Ceci est la Théorie mise en pratique sous les bons Gouvernements de la Chine, mais on sent tout de suite l'abus que les mauvais ont pu en faire et en ont fait. Ils ont permis une fonte de sapèques excessive que les mines mal exploitées d'ailleurs sont devenues insuffisantes à remplacer. L'exportation faite par les Européens a aussi contribué à cette ruine. Alors le Gouvernement s'est mis à allier ou a toléré l'alliage dans les provinces du fer au cuivre pour la fabrication des sapèques et Dieu sait ou en est le mal à cet heure. Les sapèques des provinces du Fo-Kien et du Kiang-Nan sont généralement inferieures, et contiennent un fort alliage de fer. Celles du Tché-Kiang

mais le Gouvernement n'en tient pas compte. Ce qu'il veut avant tout, c'est, dit l'Ancien Jésuite dont j'ai déjà parlé et d'après les bons auteurs, et entr'autres Houang-Tsée, et Tsieou-Kunn, "c'est qu'il n'y ait qu'une certaine quantité d'argent et de monnaie qui circule dans l'Empire, et que ce qu'il y a de l'un et de l'autre circule toujours. La valeur proportionnelle des sapèques lui sert de Thermomêtre pour mesurer la quantité respective ou même totale de l'un et de l'autre, ce qu'il ne pourrait pas faire si l'argent était monnaie et avait une proportion fixe avec les sapèques, et selon que l'un ou l'autre monte de prix il peut le faire baisser et le mettre au taux qu'il veut en faisant sortir du Trésor de l'argent ou des deniers." Ou simplement en activant ou en ralentissant l'émission des sapèques.

Le P. Amyot ne parle pas d'autres considérations, mais on peut je crois d'après cela penser que celles que Locke* et Mirabeau† faisaient valoir en faveur de l'unité de métal, n'auront pas été négligées par le Gouvernement Chinois.

Dans tous les cas le but principal et établi du Gouvernement aurait été de créer une sorte *d'échelle mobile* qui ne peut être que parfaitement exacte, d'après laquelle il pût suivre pour ainsi dire minute par minute les fluctuations des deux métaux et les besoins du commerce, de façon, à maintenir l'équilibre entre l'argent et la sapèque d'abord et ensuite entre les deux métaux et les besoins du commerce, et ce qui tendrait à prouver qu'il ne s'est pas trompé c'est que bien que la sortie de Chine de l'argent ne soit pas prohibée il n'en soit cependant pas, et que s'il en entre une quantité d'ailleurs très faible relativement à l'importance du commerce, c'est un surplus que le Gouvernement ne voit pas de bon œil et au lieu duquel il préférerait ainsi que je l'ai montré dans un précédent travail‡ l'importation de marchandises d'une utilité générale.

(Ning-Po) sont au contraire les plus pures et les plus recherchées dans les transactions. Aussi leur exportation pour les autres provinces s'est elle faite sur une échelle très grande et génante pour le commerce de la province lorsque les derniers ports ont été ouverts au commerce Européen.

Dans les provinces de l'Ouest le cuivre employé vient du Yu-Nan et contient une assez forte portion de zinc. Dans les provinces du littoral il vient du Japon où le Gouvernement s'en réserve le monopole. Ce cuivre revient à Shang-hai à 18, 20 et 21 Taëls le pecul (146 à 168 f. les 60 kilg. ½). Le cuivre Anglais révient à un Taël de plus.

* Nouvelles considérations concernant la hausse de la valeur de la monnaie etc. etc.

† Discours et réplique sur les Assignats Monnaie.

‡ Reflexions sur l'état actuel etc. etc.

Il est vrai que le premier résultat est d'autant moins difficile à obtenir en Chine qu'on n'y a pas jusqu'à présent l'habitude des entreprises extérieures qui sollicitent l'argent par de gros intérêts, mais l'on verra tout-à-l'heure que l'intérêt de l'argent y est si fort que nul autre pays ne saurait l'en détourner, et en réfléchissant à toutes les mauvaises chances de ces entreprises au dehors, on peut se demander si en tolérant un intérêt aussi élevé la loi n'a pas encore eu l'intention de les prévenir.

Quant à la dépréciation de l'argent elle dépend de trop de causes pour qu'il soit aussi facile de l'éviter. Les grands inconvénients qu'elle entraine en ce que les prix des choses usuelles, celui de la main d'œuvre ne suivant pas à beaucoup près les dégradations de la valeur de l'argent, l'ouvrier, le consommateur se trouvent bientôt dans la gène; ces grands inconvénients dis-je sont un des principaux motifs qui engagent le Gouvernement à l'empêcher autant que possible. Elle se produit de deux manières; 1° par l'encherissement des denrées; le Gouvernement y obvie dans une certaine mesure par de nouvelles émissions de sapèques; 2° par l'importation d'argent étranger et ceci explique encore en passant pourquoi la Chine est si peu favorable à notre commerce; on estime en effet que la valeur proportionnelle de l'argent a diminué, ou ce qui revient au même que les denrées ont augmenté d'un sixième, et même d'un cinquième, et même d'un quart, pour le Thé par exemple depuis vingt cinq ou trente ans. Il va sans dire que le Gouvernement et les lettrés qui redoutent les Européens exploitent le plus possible contre eux cette circonstance. Entre trois ou quatre pamphlets anti-Européens que j'ai recueillis au Se-Tchuen il y a trois ans, un est assez remarquable en ce que presque tous les arguments qu'il fait valoir reposent sur des considérations économiques mises à la portée du peuple d'une façon quelquefois juste mais toujours spécieuse.

La nécessité une fois admise de n'avoir qu'un métal monnayé il était évident que ce métal ne pouvait être que d'une valeur minime afin qu'elle fût à la portée du plus grand nombre et en choisissant le fer ou le cuivre Hoang-Ti n'a pas seulement satisfait à cette condition, mais il a encore atteint un autre but, celui de faire circuler continuellement l'argent et la monnaie existant dans l'Empire.

Et en effet si d'un coté le poids considérable des sapèques (1,000 sapèques pèsent 1 Kilg. 67 G. et ne valent qu'un Taël ou une once d'argent soit 8 francs) en rend le transport difficile, ce qui fait

qu'elles ne sortent guère de l'endroit ou elles sont, de l'autre leur accumulation est trop encombrante pour que chacun ne cherche pas à l'éviter, en sorte que pour les grands paiements éloignés on est forcé de les changer contre de l'argent, mais que dans les transactions petites ou à courte distance, c'est la sapèque qui circule et que tout le monde s'empresse de faire circuler afin de ne pas garder chez soi un hote si embarrassant; en sorte enfin que la monnaie dans les districts et l'argent dans l'Empire obéissent parfaitement aux intentions du législateur.

J'ai exposé aussi complètement que cela m'a été possible, dans ce qui précède les idées et la pratique de la Chine relativement à la monnaie considérée en elle même, laissant au lecteur le soin d'apprécier et de juger si elles ne renfermeraient pas déjà quelques raisons qui puissent expliquer la rareté en Chine pour ne pas dire l'absence totale des crises purement et seulement monétaires.

Je passe maintenant et par une transition toute naturelle aux idées et à la pratique de la Chine sur l'intérêt du prêt.

II.

"Quiconque, dit la loi Chinoise, prêtera ou en argent ou en bien-fonds, ne pourra percevoir que trois fen par lune. Quelqu'accumulée que soit la dette par les lunes et les années, le capital et l'intérêt resteront toujours les mêmes. Si on enfreint la loi on sera condamné à quarante coups de baton et à cent si l'on use d'artifice pour faire passer l'intérêt dans le Capital." (Ta-Tsing-Hoeï-Tsien).

Or comme la fen est la centième partie de l'once et comme la sixième et la onzième lune ne portent point d'intérêt, l'intérêt permis par la loi est de 30 °/₀ par an. Aucun pays Européen n'offre assurément d'éxemple, si ce n'est la Russie d'un taux légal aussi fort. Mais tandis qu'en Russie cette élevation indique une extrême insuffisance de numéraire, elle est fondée en Chine sur des motifs bien différents ainsi que je vais essayer de le montrer en passant successivement en revue quelques uns des principaux économistes.

C'est sous la dynastie des Yuen, c'est-à-dire vers l'an 1250 de notre ère que la loi parait avoir pour la première fois fixé ce maximum de tolérance et je n'étonnerai personne en disant qu'elle souleva immédiatement et qu'elle soulève encore une très vive opposition de la part de quelques écrivains qui voyaient les choses en moralistes plutôt qu'en économistes ou en hommes d'affaires.

"Sous les anciennes dynasties, s'ecrie l'un d'eux, Liang-Tsien, on ne tolérait que de très petits intérêts; celui de 30 % est une injustice et une oppression publique. On ne peut pas imaginer d'usure plus criante." "A quoi l'on repondit, (Tsien-Tchi) que si l'ancienne loi n'autorisait pas un taux élevé il n'était pas vrai de dire qu'elle le défendit; qu'au contraire comme il est prouvé que dès la grande dynastie de Tchiou (1,000 ou 1,100 avant J. C.) les profits du commerce étaient déjà prodigieux on avait tout lieu de penser que les commerçants ne travaillaient généralement pas avec leurs propres fonds et que ceux qui leur prêtaient partageaient avec eux les bénéfices obtenus au moyen de leur argent. Du reste ajoutait Tsien-Tchi, qu'importe que le taux ait été plus faible anciennement, si toutes choses ont changé depuis ce temps là, si la population s'est accrue, si le commerce a augmenté, s'il est devenu plus accessible aux citoyens; un père de famille ne doit-il pas gouverner la famille quand il a douze enfants, autrement qu'il ne la gouvernait lorsqu'il n'en avait que deux?

"Si le taux de l'intérêt a augmenté, écrivait M. V. Bonnet, dans la Revue des Deux Mondes, du 1er Janvier 1864, malgré les succés de la Californie, malgré les perfectionnements du credit etc. etc.; c'est que l'emploi du capital s'est fait sur une échelle plus considérable; et cet emploi du capital qui le rend cher il faut le bénir, car c'est lui qui a donné du travail à tout le monde, et qui assure la richesse d'un pays."

Tsien-Tchi, l'avait dit comme on voit quelques siècles avant lui et presque dans les mêmes termes; ce qu'il ajoute est encore plus frappant d'identité.

"Comment dit-il, oser accuser d'injustice une loi que le zèle du bien public a dictée, qui a été reçue avec actions de grace dans tout l'Empire, qui est générale et au profit de tout le monde, ne gène personne et repond à toutes les objections par l'état actuel de l'Empire et du commerce."

Ainsi non seulement l'élévation du taux de l'intérêt en Chine remontait déjà à une antiquité très reculée et la loi des Yuen n'aurait fait à n'envisager les reproches qu'on lui a fait, que consacrer tout au plus un fait existant dans les mœurs; mais fuisant plus que consacrer un fait en paraissant le subir, elle aurait repondu à un besoin très réel et aurait contribué au développement de la richesse publique en donnant libre essor au commerce.

La loi du 30 % selon Lin-Ouen-Kio, a eu pour but de faciliter les emprunts au dehors en sollicitant l'épargne, et les rendre

ruineux afin que ceux qui sont dans le besoin fussent et plutôt secourus et plutôt forcés à se délivrer du fardeau de leurs dettes. C'est la même pensée qui engageait M. de Cavour en 1853 à decouvrir l'emprunteur devant le prêteur, comme il l'a fait en proclamant la liberté de l'intérêt.

"Un jour de délai étant un jour de perte pour le preteur, dit Lin-Ouen-Kio, il est aussi empressé de donner son argent que l'emprunteur de le lui demander; l'appat du gain est si vif et si pressant qu'il regarde l'occasion de prêter comme une bonne fortune et va quelque fois jusqu'à se mettre à l'étroit lui même pour en profiter et ce n'est pas un des moindres services que rend le haut intérêt de l'argent que d'engager ainsi à l'épargne." "La facilité des emprunts, disait un grand Ministre, a ruiné plus de pauvres que l'intérêt de 30 °/₀. En effet outre qu'on diffère tant qu'on peut de se charger de ce joug de fer, on se hâte de le secouer, on retranche de sa dépense, on se gène pour le rembourser plutôt. L'intérêt à 30 °/₀ est un huissier qui presse le paiement jour et nuit."

Une autre conséquence, selon le même auteur, du haut intérêt c'est qu'il a diminué le nombre des oisifs.

"L'état le plus mal gouverné, dit-il, est celui ou il y a le plus de citoyens salipses et isolés qui ne tiennent à la société que par les biens qu'elle leur procure comme sont les rentiers. Or quelques fonctions que l'on ait, quand l'intérêt est aussi élevé on n'a plus le moyen d'être rentier. Les debiteurs sont moins nombreux; on emprunte moins, l'on rend plus vite, et l'argent restant sans emploi, force ses propriétaires à travailler eux mêmes pour le faire produire."

Et on peut ajouter qu'en effet le nombre des rentiers est presque nul en Chine.

"Enfin la cherté de l'argent fait qu'on est plus circonspect sur la nature de l'entreprise ou de l'opération commerciale en vue de laquelle on emprunte."

Lin-Ouen-Kio qui est surtout moraliste ne peut s'empecher de terminer après avoir constaté que le taux de l'intérêt a toujours été en augmentant d'une génération à l'autre, en deplorant la dureté des temps et des mœurs telle qu'il a fallu autoriser le prêt à 30 °/₀ pour que les pauvres ne fussent pas privés du secours des emprunts et que les riches consentissent à leur prêter. C'est une garantie que la loi met entre les mains des derniers contre les premiers qui eussent pu se targuer de leur pauvreté.

Tsien-Tchi exprime la même opinion que Lin-Ouen-Kio. Il insiste sur le développement que la loi du 30 °/₀ a pourvu au commerce et sur l'influence qu'elle a eu sur la circulation de l'argent en y faisant rentrer les épargnes; puis il ajoute:

"Les negociants et les marchands eussent-ils des fonds suffisants pour se passer du secours des emprunts, ce qui est impossible dans l'état actuel à cause de l'inégalité des fortunes et de la proportion de l'argent qui circule avec la valeur des échanges dans tout l'Empire, les négociants, dis-je, et les marchands pussent-ils se passer du secours continuel des emprunts, il serait de l'intérêt de l'état qu'ils en fissent et qu'ils les rendissent le plus lucratifs possible afin d'interesser le public à ses succès. Si on veille partout avec tant d'intérêt à la facilité, à la commodité et à la sureté des transports par terre et sur eau; si toutes les affaires qui concernent le commerce dans les ventes, achats et expéditions sont terminées avec tant de célérité; si les privilèges des foires et marchés sont si scrupuleusement conservés etc. etc. c'est parceque tout le monde a des fonds dans le commerce ou s'intéresse à ceux qui en ont. Le Gouvernement ne peut qu'exiger les secours qui lui sont dus et qu'il importe à l'Etat de lui procurer; mais c'est le haut intérêt de l'argent qui les procure infailliblement. C'est un grand coup d'état que la loi du 30 °/₀."

Man-Chan dit:—"L'Etat n'a mis sur le commerce aucun autre impôt que celui des douanes parceque le négociant et le marchand tirant leurs profits du public c'est au public qu'ils feraient payer les impôts qu'on leur demanderait, et l'Etat n'aurait fait que les créer réceleurs de ces impôts ce qu'il n'a pas voulu. Cependant si les besoins de l'Etat exigeaient la création d'un nouvel impôt, il est évident que celui qu'il établirait sur les marchands serait le plus équitable, le moins à charge aux pauvres parceque les consommations sont communes à toutes les classes de la société et proportionnelles à leurs fortunes. Tout le monde y applaudirait. Or qu'est ce que l'augmentation du taux de l'intérêt consacré par la loi du 30 °/₀ sinon un nouvel impôt créé pour subvenir aux besoins du commerce intérieur de l'Empire et cédé immédiatement aux marchands? Comme c'est sur les profits du commerce et sur le public qu'il est levé chacun ne le paie pas plus qu'à proportion de ses consommations il n'est pas moins équitable que celui qu'on établirait sur les douanes et il est plus économique en ce qu'il épargne des frais de recette.

"Tsien-Tchi, que j'ai déjà cité dit, que le haut intérêt de l'argent rend deux services à l'Etat, le premier: de diminuer le commerce des objets de luxe en diminuant le nombre des individus auxquels ils sont destinés par l'intérêt qui s'ajoute au haut prix que le marchand est obligé de demander; le second: d'épuiser vite au profit de la masse du peuple les fortunes de ceux qui peuvent se permettre ces objets de luxe."

Ouan-Yang partage cet avis.

L'Etat selon Tchao-ing a voulu empêcher que la valeur des biens fonds augmentât et que celle de l'argent diminuât par la médiocrité de l'intérêt, et faire en sorte en le portant a un taux considérable que la distribution des biens fonds fut toujours dans une certaine proportion avec le nombre des familles et que la circulation de l'argent fut plus uniforme. "Il est évident, dit-il que l'argent étant au dessous des biens fonds, parcequ'il est soumis par lui même et par ses revenus, à plus d'éventualités, la même valeur en biens fonds sera toujours préférée a celle qui est en argent; il est évident aussi que pour ne pas courir de risques on aimera mieux posséder une moindre valeur en biens fonds avec plus de securité. Cette moindre valeur est proportionnée aux risques de l'argent et de ses profits. Plus l'intérêt de l'argent est haut, plus il faut de biens fonds tous risques compensés, pour équivaloir à l'argent, comme il faut plus d'arpents de mauvaise terre pour équivaloir a une terre excellente. Or plus il faut de biens fonds, pour équivaloir à l'argent, plus il est aisé aux pauvres citoyens de conserver ceux qu'ils ont, et d'en acquérir même une certaine quantité, puisque cela ne suppose pas la richesse; plus par la même raison, les partages sont faciles dans les familles et avantageux à l'Etat, pour les terres que le Gouvernement a surtout en vue."

Pourquoi cela? "C'est que les fonds en terres produisent toujours plus à ceux qui les font valoir eux mêmes et que les riches qui en possedent plus qu'ils n'en peuvent cultiver, perdent pour l'Etat en les négligeant ou pour eux mêmes en les donnant à d'autres ce que gagnent ceux qui les cultivent eux mêmes; perte, par conséquent qui étant aggravée par les risques de la récolte etc. etc. leur rend l'achat des terres moins avantageux qu'aux pauvres et doit autant le faciliter aux derniers qu'elle doit en dégoûter les premiers."

Je compte dans un prochain travail exposer quelques faits qui ne seront pas j'espère sans intérêt pour l'étude de la petite et de

la grande culture, mais en attendant on peut considérer comme éxactes en ce qui concerne la Chine les allegations qui précèdent.

Tchao-ing après avoir prouvé que les possessions du peuple en terres ont augmenté à proportion que l'intérêt de l'argent a été porté plus haut, conclut comme il a commencé en disant que le grand bien qu'a produit la loi du 30 °/₀, c'est qu'elle a rendu la propriété de la terre accessible à un plus grand nombre d'individus.

Telles sont aussi brièvement que possible les opinions des auteurs qui ont écrit sur la loi de l'intérêt. On pourrait facilement en augmenter la liste et on y trouverait des développements bien plus étendus mais outre que la traduction du Chinois, n'est pas toujours très aisée il faudrait pour y trouver tout l'intérêt qu'ils peuvent posséder une connaissance profonde et speciale de la question. J'ai donc cru devoir m'en tenir à ces extraits qui ont été traduits par le P. Amyot, et de la fidèlité desquels on peut être assuré.

Si d'ailleurs on voulait connaitre l'opinion courante actuelle parmi les hommes d'affaires qui, sans remonter toujours aux théories et aux commentaires, ont une opinion arrêtée sur les usages et les idées reçues qui régissent une grande partie de l'ordre social en Chine, on verrait qu'elle procéde évidemment des raisonnements de ces auteurs.

L'argent, disent-ils, et il n'y en a pas un de ceux dont j'ai pu accidentellement recueillir le sentiment à ce sujet depuis cinq ans, qui ait différé des autres, l'argent étant une marchandise le Gouvernement ne saurait pas plus, en principe avoir le droit d'en tarifer le prix qu'il n'a celui de tarifer celui des autres marchandises.

Cependant comme cette marchandise est admise à representer toutes les autres, il importait dans la pratique qu'elle restat aussi indépendante que possible des influences particulières qui en eussent amené la rareté, telles que les spéculations de bourse, les monopolisations monétaires dont elle aurait été l'objet il importait que sa valeur ne dépendit que des circonstances générales qui pèsent à la fois sur tous ou sur la généralité des objets de consommation, ou bien, que du développement du commerce; seuls cas où la rareté puisse être bien réelle. Dans les autres cas elle n'est que factice puisque la quantité d'argent qui éxiste dans l'Empire est toujours la même et qu'elle ne donne prise à aucun fléau ce qui fait que l'on pouvait avec d'autant plus de justice désirer de voir sa valeur fixée.

D'un autre coté cette fixation ne pouvait pas être arbitraire et elle l'aurait été ou le serait devenue si le Gouvernement n'avait

consulté pour l'établir que les circonstances du moment où il l'établissait puisque ces circonstances sont infiniment variables soit en plus soit en moins.

Il a donc cherché à concilier toutes les exigences, il a cherché à ménager la société du prêteur à satisfaire aussi aux besoins de l'emprunteur en otant au premier de trop grandes espérances et par cela même l'envie d'accaparer l'argent; il a voulu enfin ménager l'avenir.

Et ces mêmes hommes d'affaires estiment que le but est parfaitement atteint; et en somme disent-ils le 30 °/₀ n'est qu'un maximum fondé surtout sur les probabilités, jusqu'auquel peuvent aller les oscillations du prix de l'argent. Dans la pratique l'intérêt pour les prets ordinaires ne dépasse guère 20 ou 22 °/₀ et si quelque fois il monte jusqu'à 50 et 70 °/₀, outre que ce n'est que pour un temps très court et pour des opérations qui promettent de grands profits, dans les campagnes il ne va pas au dela de 10 ou 12 °/₀.

Je ne sais si ce chapitre pourra jeter quelque jour sur quelques unes des questions pendantes en France. J'espère cependant qu'on ne le lira pas sans intérêt, lors même que certaines des opinions omises ne feraient que reproduire les renseignements des maitres de la science economique en Europe et peut être à cause de celà même.

Il me reste maintenant, après avoir parlé des signes représentatifs du capital et du prix convenu de ce capital, à exposer les voies et moyens à l'aide desquels s'opère la circulation, c'est-à-dire, les usages et coutumes sur lesquels sont fondés les établissements de crédit.

III.

Je dis la loi et les coutumes, car la loi et le Gouvernement interviennent si rarement, qu'en faisant entrer leur intervention en ligne de compte j'aurais craint d'en donner une idée exagerée. On verra en quoi elles consistent en suivant avec moi les differentes institutions de crédit qui fonctionnent en Chine.

Elles sont de quatre genres:

1° Les petites sociétés d'argent ou Hoeï-Tsien.

2° Les Tong-Pou ou Mont de Piété.

3° Les Docks qui portent le même nom en Chine que les précédentes "Tang-Pou," mais en différent toutefois en ce qu'ils sont destinés spécialement au grand commerce.

4° Les Banques.

Dans le travail intitulé : *Notice sur les Petites Sociétés d'Argent dites* Hoeï-Tsien, en Chine, imprimé dans le Journal de cette société pour 1868, et qu'il est par conséquent inutile de réproduire ici, j'ai exposé le jeu et les statuts de huit ou neuf de ces sociétés.

Quant aux Monts de Piété on en a trop souvent parlé pour que j'aie à apprendre quelque chose de nouveau.

Les docks sont moins connus et sont en effet plus rares. Je n'ai pu me rendre compte de leur organisation et de la manière dont ils fonctionnent que dans la province du Se-Tchuen, et ils paraissent n'exister que dans cette province et celles qui l'avoisinent au Nord et à l'Ouest de la Chine. Mais comme ils n'embrassent qu'un genre d'opérations assez restreint et qui ne touche pas essentiellement au sujet dont il s'agit, comme aussi, je dois l'avouer, je n'ai pas sous la main, malgré les recherches que j'ai faites, les notes que j'ai prises au Se-Tchuen, je remettrai les renseignements que j'aurais voulu donner maintenant à quelque autre occasion, convaincu que ces notes ne sont qu'égarées et que de nouvelles recherches auront un plus heureux résultat.

Restent les Banques.

Ce qui prouve que les intentions que l'on prête à la loi du 30 °/₀ ne sont point chimériques, c'est que dès qu'elle fut promulguée, le Gouvernement songea à établir des banques d'émission (Bureaux d'emprunt) ou l'on aurait prêté au taux ordinaire du commerce jusqu'à celui de 30 °/₀ qu'elles ne devaient pas dépasser.

La pensée dut en effet lui en venir d'autant plus facilement qu'il était riche en fonds et pouvait les augmenter à son gré, et dès qu'il en manifesta l'intention, les plans et les projets affluèrent. A en croire les auteurs : "C'était un moyen sur pour se rapprocher enfin du Gouvernement des premières dynasties et rompre pour jamais la fatale barrière de l'indigence qui sépare le citoyen du citoyen et le rend comme étranger dans le sein de sa patrie. On alleguait que dans les premiers temps l'Etat était chargé de tous les pauvres et n'en était que plus riche, parceque personne n'était réduit à s'éxiler pour assurer sa subsistance, les riches menaient une vie moins oiseuse et les pauvres une vie moins misérable. On citait l'exemple de la dynastie des Han qui avait réussi successivement à rétablir le commerce et l'agriculture, par les avances qu'elle avait faites aux négociants et aux agriculteurs. *On disait encore que c'était le meilleur moyen de rendre utiles et profitables ces sommes que l'Etat dépensait en aumônes, en grâces et en récompenses.*

"Quant à l'administration des bureaux d'emprunt et à la manière dont ils devaient être distribués et fournis de fonds, les sentiments étaient fort partagés. Les uns voulaient que les bureaux d'emprunt fussent les mêmes que les bureaux de recette, et qu'on suivit les mêmes répartitions et proportions pour les fonds qu'on leur assignerait. D'autres prétendaient que l'administration des emprunts étant une administration de grâces et de bienfaisance, il fallait la confier par districts à ceux des riches citoyens qui réunissaient les suffrages de la multitude par leur probité; un choix si honorable deviendrait une distinction, et une récompense assurerait leur zèle et leur application dans un emploi également pénible et délicat. Quelques uns étaient d'avis que pour marcher encore de plus près sur les traces de la sage antiquité, on prendrait dans chaque endroit une note de ceux qui seraient dans le besoin pour que les grands officiers de province determinassent la juste répartition des prêts."

Cependant tous ces projets échouèrent non pas comme le dit le Père Amyot, parceque le Ministre n'avait jamais goûté la création des banques d'émission, mais parcequ'on craignit de voir se renouveler les abus et les dangers auxquels des établissements semblables avaient donné lieu sous la dynastie des Soung du Nord (500 ans après J. C.) où l'on alla jusqu'à émettre de véritables assignats avec cours forcé, et la banque d'émission en resta là. Et comme cette espèce de banque est la seule que le Gouvernement put avoir intérêt à créer ou qui puisse avoir besoin d'un privilège particulier, il n'y a donc pas en Chine de banque de l'Etat proprement dite ou de banque privilégiée.

Le Gouvernement n'abandonna toutefois pas les vues qu'il s'était proposées, mais il s'efforça de les remplir par un autre moyen que l'on verra toute à l'heure.

Il y a bien dans chaque province une banque privée qui se charge du service de la Trésorerie du Gouvernement local, en recouvre les impôts, et l'on pourrait dire que cette banque a bien un reste de privilège, mais il serait plus exact de dire qu'elle n'a droit qu'à un agio; c'est-à-dire qu'elle se fait payer les impôts en argent plus pur que l'argent ordinaire de la place, ce qui lui procure un bénéfice d'environ 2 °/₀ destiné à la rémunérer de ses services.

Du reste elle ne se distingue en rien des autres banques privées et se livre aux affaires de commerce.

Il y a bien aussi des banques d'émission privées, mais leur rayon d'action et d'influence est très limité et leur nombre diminue tous

les jours. Je n'en connais plus guère qu'à Pékin, dans la province du Tche-lï. Encore faut il dire que les Gouvernements centraux ou locaux tendent à les décourager et se montrent très sévères pour elles.

Il n'est même pas rare qu'ils ordonnent la suppression de plusieurs d'entre elles à cause des spéculations immorales auxquelles elles se livrent et peuvent se livrer d'autant plus facilement que le Gouvernement n'intervient que pour les supprimer quand leurs abus sont trop criants, mais n'a aucun droit de contrôle sur leurs opérations; et que les billets qu'elles émettent descendent presqu'à des valeurs infimes (0.50 f.), ce qui leur permet de faire des émissions hors de toute proportion avec les capitaux dont elles disposent à Pékin. Cependant, il éxiste de ces banques d'émissions très honorables dont les billets sont pris pour leur valeur nominale mais à l'abri de celles-ci, il s'en établit d'autres qui n'ont qu'une durée éphémère et disparaissent après avoir fait un plus ou moins grand nombre de dupes.

Leurs billets tombent bientôt à 25, 30, 40, et plus au dessous de leur valeur d'émission. Le Gouvernement tolère ce genre de banque à Pékin, grâce peut-être à la corruption de quelques uns de ses membres et puis aussi parceque, à certaines époques, lorsqu'il y a à faire les paiements des troupes etc., elles leur rendent de véritables services.* Quant à Fou-Tcheou, ces banques sont dans un discrédit complet et ne peuvent se soutenir qu'à force de mauvaise foi, pour ainsi dire, et aussi parceque quelques mandarins locaux y ont des intérêts. Les billets qu'elles émettent payables en piastres n'ont qu'une valeur de 20 et 60 même au dessous de leur valeur numerale.

C'est à quoi se réduit en Chine le billet de banque, le billet au porteur.

Mais les banques que l'on peut considérer comme les véritables banques de la Chine, sont des banques d'escompte et de dépôt.

* Il parait même que le Gouvernement actuel et celui qui l'a précédé ont souvent eu des besoins si forts, que ces banques ayant refusé de le servir, il s'est vu forcé d'émettre les billets lui-même. Mais ils sont refusés par le commerce qui n'en offre que la moitié en moins de leur valeur nominale, et ne sont acceptés pour cette valeur que par les mandarins et les soldats que le Gouvernement avait à payer. On a cessé de payer les soldats de cette façon, mais les mandarins le sont encore.

Ainsi ces billets n'ont aucune influence pour le commerce et n'ont de cours forcé que pour ceux qui les reçoivent de 1ère main du Gouvernement.

C'est celles là qui jouissent de la faveur populaire, que le Gouvernement encourage et auxquelles il accorde ses faveurs. Mais il ne faudrait pas se faire une haute idée des faveurs du Gouvernement Chinois. L'on verra tout à l'heure à quoi elles se réduisent.

On peut dire que l'usage de ces banques remonte en Chine presqu'au commencement du monde. Aucun auteur dans tous les cas ne leur assigne de commencement et il est plus que probable qu'elles sont nées sous l'Empereur Hoang-Ti (2,600 ans avant J. C.) en même temps que la sapèque, dont le poids incommode dût faire songer aux moyens d'en éviter le transport. On peut croire aussi que le peu de solidité des maisons Chinoises, ainsi que les incendies auxquelles les expose le bois qui sert plus souvent à leur construction dussent aussi engager dès long temps les citoyens à réunir leurs épargnes dans des bâtiments spéciaux sous la garde d'un comptable qui tenait une note de tous les dépôts qui lui arrivaient et faisait les restitutions par virements.

Cette raison a certainement sa valeur. Quoiqu'il en soit, l'usage de ces banques est ainsi que je le disais, devenus tellement populaire qu'aujourd'hui, il n'y a tel négociant, fermier, ou simplement d'ouvrier un peu rangé qui n'ait pas son compte ouvert dans quelques maisons de banque. C'est là que se font leurs paiements par l'intermédiaire des banquiers qui sont également prêts à servir le négociant faisant des transactions, de cinq ou six cent mille francs à la fois, et le petit artisan qui veut acheter pour trente ou quarante francs les instruments de son métier. Ainsi je le répéte les banques Chinoises sont surtout des banques de dépôt dont les opérations principales comprennent l'escompte sur place, la négociation des lettres de change, les avances sur propriétés meubles ou immeubles* et sur les marchandises et l'échange des métaux précieux. Leur nombre n'en est seulement déterminé, mais le Gouvernement cherche à l'augmenter le plus possible.

* Il y a une sorte d'emprunt sur Immeuble qui est très remarquable. Voici en quoi il consiste. L'emprunteur remet au prêteur ses titres de propriétés; au bas ou au dos desquels il déclare la somme qu'il a réçue et appose son cachet. Cette somme est ordinairement les neuf ou les huit dixièmes de la valeur de la propriété, un peu plus, un peu moins, suivant le cas. Et à partir de ce moment c'est le prêteur qui est substitué au propriétaire emprunteur. Jusqu'au moment de la restitution, c'est à lui qu'appartiennent les récoltes bonnes ou mauvaises si c'est une terre. Cependant les réparations extraordinaires sont faite au compte du propriétaire, mais en cas d'inondation la perte est subie par le prêteur, et le propriétaire peut lui laisser sa propriété pour toujours.

La négociation des lettres de change à longue échéance était il y a quelques années encore une très grande ressource pour les banques Chinoises, mais elle leur a été enlevée par les banques Européennes qui se sont établies depuis peu en Chine, car ces lettres de change à longue échéance n'étaient crées que par le commerce étranger, et les lettres de changes tirées d'une ville à l'autre de Chine ne sont jamais qu'à une date très rapprochée.

De sorte qu'aujourd'hui le principal élément d'affaire pour les banques Chinoises, c'est le dépôt qu'elles cherchent d'autant plus à encourager que la plupart d'entre-elles n'ont qu'un capital très limité. A cet effet elles ne se bornent pas à accorder un intérêt sur la balance journalière des dépôts, mais elles s'engagent vis-à-vis de leurs clients à leur donner toutes les facilités possibles dans le cas où ils viendraient à avoir besoin d'avances. L'usage est en effet qu'un client ayant un dépôt peut obtenir à l'occasion un prêt double de la somme en dépôt en lui donnant une simple garantie personnelle, un billet revêtu de son seul cachet (ou signature) au taux d'intérêt du jour. Seulement cette espèce d'emprunt n'est presque jamais qu'à une échéance très courte de 5 à 10 jours au plus.

En outre tout déposant peut retirer son dépôt quand il le veut sans avis préalable, et sans que son argent cesse de lui rapporter intérêt jusqu'au moment de retrait. Enfin, dans le cas de transactions faites avec des Européens ou avec des Chinois d'un autre pays et dont il est peu connu, ce déposant a encore le droit de reclamer la garantie de son banquier. Il est vrai que dans ce cas, celui-ci perçoit une commission assez lucrative, mais il n'en est pas moins vrai non plus que ce concours aide à beaucoup d'affaires qui seraient impossibles.

Grâces à ces moyens les banques Chinoises réussissent à se procurer des dépôts très importants et dépassant souvent même de dix à quinze fois la valeur de leur capital, ce qui égalerait les résultats obtenus par quelques rares banques Européennes et entre autres par le London & Westminster Bank, et par l'Union Bank.

C'est ainsi que dans le Nord de la Chine, beaucoup de Princes Tartares n'ayant pas d'autres biens que ceux qu'ils reçurent des premiers Empereurs de la dynastie actuelle ont engagé leurs terres à des Chinois, depuis 250 ans, et ont laissé ses familles qui, moins laborieuses que les Chinois et n'ayant jamais pu rendre les sommes empruntées par leurs aïeux, se trouvent être à la fois propriétaires de vastes domaines, et n'avoir pas de quoi vivre.

Une des opérations les plus remarquables peut-être des banques Chinoises c'est leur système de virement que l'on pourrait sans exagération comparer aux *clearing houses* de Londres, etc.

Chaque déposant reçoit de son banquier un livre à double colonne, dans l'une desquelles seront inscrites à son crédit toutes les sommes qu'il dépose, et dans l'autre à son débet, toutes les affaires qu'il fera par la suite, c'est dès lors chez son banquier qu'il envoie tous les créanciers pour les paiements qu'il a à effectuer à la seule condition d'envoyer chez lui chaque soir avant de fermer son magasin ou ses bureaux son commis avec le livre en question indiquant les dispositions qu'il a prises.

Cette precaution remplie, le reste ne le regarde plus. Le lendemain matin les commis des divers banquiers le réunissent, indiquant dans leurs livres les virements des sommes à payer, ou à recevoir par leurs clients et réglent leur balance soit avec de l'argent comptant, soit même le plus souvent en laissant telle quelle, sauf un intérêt à payer ou à recevoir aux taux du jour jusqu'au réglement définitif qui n'a lieu ordinairement qu'une fois par an.

Ce système de virements ne rencontre jamais aucunes difficultés, non seulement entre banquiers et négociants, mais même entre propriétaires et ouvriers. On ne saurait trop à ce sujet signaler l'esprit de corps qui anime les banquiers et qui les porte à s'entre-aider de tout leur possible, ce qui, en définitive tourne au profit du commerce. Aussi lorsqu'il arrive qu'un des banquiers doit verser des sommes plus fortes que celles qu'il a en caisse, ses confrères le tirent de très bonne grâce d'embarras en lui laissant les sommes en question au taux du jour.

Je ne crois pas nécessaire d'insister sur tous les avantages que présente ce système, tels qu'économie de temps, de numéraire mise en circulation des épargnes journalières du petit commerce etc.

Cependant lorsque le numéraire devient rare, les banquiers, en Chine comme en Europe, cherchent non seulement à rentrer dans les avances qu'ils auront faites à leurs clients, mais encore à se faire payer par leurs confrères les sommes qu'ils auront laissées en balance chez eux. C'est alors que l'usage des banques Chinoises offre peut-être une supériorité sur les banques Européennes.

En effet tandis qu'en Europe, et dans des circonstances analogues, les détenteurs de billets au porteurs s'empressent de les présenter aux banques d'émission qui sont en conséquence forcées de restreindre leurs opérations de toutes natures pour se mettre à même de faire face aux exigences de leurs bureaux d'émission dont

les billets surpassent de beaucoup en général les valeurs en caisse dans les bureaux de paiement, ce qui détermine une crise et la rend d'autant plus sérieuse; les banquiers Chinois s'accordent en moyenne de cinq à quinze jours de temps pour le paiement au comptant des sommes qu'ils se doivent respectivement, et ce délai devient un palliatif pendant lequel la crise se modère, ou bien l'opinion publique se fixe, ou les banquiers ont le temps de faire venir des capitaux des provinces voisines ou pendant lequel enfin les banquiers peuvent faire affluer des dépôts chez eux en élévant le taux de l'intérêt.

Il va sans dire que dans ces moments de crise, toute banque peu solide ne trouve pas de nouveaux dépôts, quelqu'élevé que soit l'intérêt qu'elles promettent, et qu'il y a toujours par conséquent quelques faillites. Mais les maisons solides en sont quittes pour payer l'argent un peu plus cher. Du reste la seule époque à laquelle peut se faire cette rareté de numéraire est la fin de l'année où, selon une ancienne habitude, tous les comptes doivent être reglés et soldés, c'est alors que ces demandes se multiplient chez les banquiers. Mais comme elles sont prévues, les banques ont soin de se pourvoir de façon même qu'elles peuvent accorder des facilités à leurs clients sérieux. Quant aux spéculateurs hasardeux et aux négociants douteux ils liquident à grande perte ou ferment leurs maisons, de sorte que ces grands réglements par leur périodicité rendent de grands services au commerce par les éxécutions qu'ils amènent tout naturellement et en préservant de grandes crises. Et en effet les crises des monnaies sont extrèmement rares en Chine, ne sont jamais d'ailleurs que restreintes à une petite localité et passent très vite, et sans laisser de traces profondes.

J'ai parlé des faveurs que le Gouvernement accordait aux banques. Les crises et surtout celles qui ont un caractère plus grave que les crises de monnaie, celles par exemple qui se produisent à la suite de récoltes insuffisantes, sont les occasions où il les distribue. A cet effet les Gouverneurs de provinces sont autorisés à mettre au premier signe d'alarme à la disposition des meilleures maisons de banque, des sommes considérables prises sur les fonds provenant de l'impôt, et comme ainsi que je le disais, c'est à la fin de l'année que ces crises se manifestent quand elles doivent avoir lieu, il est ordonné à tous les mandarins de faire rentrer les impôts pour cette époque. On ouvre aussi dans ce cas les gréniers publics de réserve, et l'on fait des prêts de grains portant intérêt aux cultivateurs et aux nécessiteux, on en donne gratuitement aux pauvres

etc., et si les causes de la crise sont tellement graves, que tous ces secours ne suffisent pas à la faire cesser, il est du moins certain qu'ils les rendent moins douloureuses.*

En résumé, l'on peut dire que le service des banques plus multiplié en Chine qu'en Europe, s'accomplit on ne peut pas plus régulièrement et grâce aux *pass-books* le billet de banque y est à-peu-près inutile.

Voilà ce que j'avais à dire sur les institutions de crédit de la Chine; que si l'on trouve que quelques parties n'ont pas reçu tout le développement désirable, tandis que d'autres auraient pu être passés sous silence, je prierai de vouloir bien plutôt considérer ma bonne volonté que mon peu d'habilité s'essayant sans guide sur un sujet encore nouveau.

Qui se malgré cela quelques uns des faits exposés méritent un regard d'intérêt, l'on me permettra de rappeler en l'appliquant à la Chine, ce mot d'un des hommes qui explorèrent les premiers les forêts de l'Amérique; ce sont des fleurs du pays, mais il y en a bien d'autres.

* On prévoit facilement les abus que peuvent amener de pareilles habitudes, laissant aux mandarins sous une dynastie faible et en décadence comme aujourd'hui une habitude aussi grande. Les caisses et les gréniers sont presque toujours vides, mais n'ont été vidés que par leur cupidité qui a beau jeu.

ARTICLE V.

ON THE INTRODUCTION AND USE OF GUNPOWDER AND FIREARMS AMONG THE CHINESE. WITH NOTES ON SOME ANCIENT ENGINES OF WARFARE, AND ILLUSTRATIONS.*

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AMONG the ideas most widely diffused with respect to the Chinese and their discoveries, the statement that Gunpowder owes its origin to their ingenuity is especially prominent; yet the grounds upon which this conclusion has been based will probably be found unsatisfactory after a close investigation. The data requisite for forming a serious opinion with reference to this point are, indeed, obscure, and scattered widely through an enormous section of the bulk of Chinese literature,—hence, probably, the ease with which unsupported conjectures in relation to the question have gained authority as [illegible]; but this circumstance itself convinced the writer, now some years ago, that a careful scrutiny of the entire subject was not only desirable but would also repay the toil bestowed upon it, and he has subsequently discovered and collated a considerable mass of evidence bearing, more or less immediately, on the question propounded as the object of inquiry, viz: the introduction of explosive and projectile compounds in Chinese warfare and ordinary life. The information thus collected is made use of in the following paper, with the hope that some fresh light may be thrown on a subject which has not, hitherto, received any close attention.

In fact, the discovery of gunpowder by the Chinese seems to have been taken for granted by early writers,—principally the Jesuit missionaries—and the claim they advanced has been recognized by even such erudite and careful scholars as Sir George Staunton and Dr. S. Wells Williams. The former has stated that "nitre is the natural and daily produce of China and India; and

* Read before the Society on 18th May, 1869.

there, accordingly, the knowledge of gunpowder seems to be coeval with the most distant historic events." Dr. Williams, in his *Middle Kingdom*, vol. II, p. 160, writes that "the invention of gunpowder is probably due to the Chinese, but fire-arms of effective make were probably not known until the time of the Mongols or shortly before." The above are assumptions of which numerous other examples might be quoted from writers upon China and from technical works, but for which no authority is alleged. They rest, in the writer's opinion, principally upon misapprehensions of the truth; but they indicate precisely the branches into which the present inquiry will be directed.

If we turn from the confident statements of the encyclopœdias to purely Chinese sources of information, we find that every writer who treats seriously of the invention and use of gunpowder disclaims the honour that Europeans have attributed to the natives of the Middle Kingdom. In lieu of finding the explosive compound referred to in ancient literature, as is frequently stated to be the case by European writers, we are obliged to descend to a comparatively recent period before meeting with any mention either of gunpowder or of its uses. Probably the first disquisition relating to gunpowder that exists in Chinese literature is that which occurs in the work entitled *Wuh-li-siao-she* (1) (App. *A*) by Fang I-che, who flourished during the last reigns of the Ming dynasty, or, therefore, between 1600-1644 A. D. In Book VIII of this production, the title of which may be rendered as *Parvæ Notitiæ de Rerum Naturâ*, a section is devoted to "Explosive Compounds" under the title *Huo-Pao* 火爆, and this commences with the following statement: "Gunpowder (*huo-yao* 火藥) came from the outer barbarians. It is recorded that in the second year of K'ai Pao of the Sung dynasty —969 A.D.—Yoh I-fang laid fire-arrows (*huo-tsien*) before His Majesty; and Chang Ho-chung relates that Yü Yün-wên discharged 'thunder-bolt projectiles' from his vessels at the battle of Ts'ai-she. (2) These were made of paper, filled with lime and sulphur, and on falling into the water they burst into flames which leapt upwards. The Emperor Yung Loh (1403-1424 A.D.) established the Shên-ki Brigade, (3) and Europeans have brought the

(1) In order to avoid the too frequent interprinting of Chinese characters in the text of the above article, the names of all the Chinese works to be quoted, and those of their writers, will be collected in a supplementary note.

(2) This historical fact will be referred to more minutely below.

(3) This will be further referred to.

art to perfection with their measures for ascertaining distance." The author of the above passage was a man whose reputation for enlarged knowledge still remains high among his countrymen, and who was evidently well acquainted with the writings of the Jesuit missionaries at the Court of Peking. The copy of his work from which the foregoing translation is made is the second edition, published in 1664, and it would seem that not less than thirty years had elapsed since the first appearance of the work when the reprint was made. This gives approximately the date 1630 for the compilation itself. The author continues: "In the times of the T'ang dynasty (seventh to tenth century A. D.), there existed contrivances called 'fire-trees' and 'silver-flowers,' in which, I am of opinion [gunpowder] was already used. Saltpetre, mingled with pine-charcoal, explodes straight forward; but, with sulphur, the explosion is lateral. If the sulphate of iron (*hwang-fan*) be added, the compound bursts in a shower of sparks. The powdered charcoal prepared from the *jŏ-p'iao* (a species of gourd?) renders [the explosion] noiseless; and the *si-k'wang* stone, powdered, prevents the flame from being seen for some time after the explosion.....If iron-dust (4) and camphor are added, coruscations are produced. To the above the name *yen-huo* 烟火 (fireworks, or, literally, smoke-fire) is given." In continuation of this subject, the author quotes from the *T'ing-she*, a work of the 13th century, an incidental mention of the employment of *p'ao* or *ballistæ*, but without seeking to connect these engines (which will be fully treated of below) with the employment of gunpowder.

Having thus obtained the opinion of an eminent Chinese authority with reference to the exotic origin of gunpowder, it will be well to seek at once the sources on which he may have based his judgment, and to commence with the earliest notices existing on the subject. It may be advisable to premise by asserting that ancient Chinese literature—that is to say, the literature of all ages antecedent to the T'ang dynasty—contains no passage whatever in which a mention of gunpowder or any analogous compound exists. This is acknowledged by a modern writer who is unsurpassed among his countrymen in extent of research and critical acumen, and whose especial province was antiquarian investigation. Chao Yi, the writer referred to, published his immense collection

(4) The use of this ingredient in Chinese fire-works is well known in Europe. It is stated in Rees' Cyclopædia that "the Chinese use cast-iron reduced to a powder more or less fine, and known as 'iron-sand.'"

of Jottings, occupying 16 octavo volumes, in 1790, under the title *Kai-yü-ts'ung-k'ao*, (App. *B*) and devotes a section in Book 30 of this work to the subject of Gunpowder and Artillery, to which the present writer is indebted for much information. His opening remarks are to the effect that "the employment of fiery contrivances in warfare was resorted to in the times of antiquity, as for instance in the *Chow-kwan* (Official Ritual of Chow, one of the most ancient classics) we read of fire-archery and *wang-she* 枉矢 (explained by the commentators as fiery darts), which were the origin of this practice; but the 'flame-elephants,' 'fire-oxen,' and conflagrations such as were produced at the battle of Ch'ih Pi were effected by means of straw, sticks, or reeds tied in bundles and steeped in oil or fat, and were not devices in which gunpowder was employed."—As if anticipating the misconception which has, in particular, led European writers to a belief in the early origin of gunpowder, Chao Yi goes on to remark that "what were called *p'ao* 礮 were all engines for hurling stones by the aid of machinery;" but this is a subject which must be passed over for the present, to be more fully investigated below. If we now seek the point at which the earliest indications of a knowledge of gunpowder are recognized by Chinese inquirers, we shall find that the first landmark in this channel of research proves to be the humble fire-cracker so universally known in connection with Chinese festivities. The use of this combustible is unanimously referred by native tradition to a superstitious origin, and to this fact it is doubtless owing that its introduction and original significance have been investigated with some care. Chinese antiquarians are agreed that the fire-crackers of the present day merely imitate the crepitating sound of bamboos which were formerly burnt as a charm for exorcising evil spirits—a practice the earliest recorded notices of which occur in two celebrated works, of which one is known to have been produced about the middle of the sixth century of our era, and the other is conjecturally attributed to the same period. These are the *King-ts'u-sui-she-ki*, (App. *C*) which treats of the popular customs prevailing at various seasons of the year in the region now constituting the Provinces of Hupeh and Hunan,—and the *Shên-i-chwan*, (App. *D*) a collection of mythological and fantastic legends. The former opens with the following passage: "The first day of the first month is the day of the Three Beginnings. (5)

(5) Explained as the beginning of the year, the month, and the season.

In the times of Confucius it was called *twan-yüeh* 端月 or the month-regulator. At cock's-crow people arise, and their first act is to crackle bamboos by means of fire in front of their dwelling-places(6) in order to drive away the malignant demon called *Shan-sao* 山臊."

Upon this passage, which is all that the above-mentioned work has to say on the subject, the *Shên-i-king* throws some additional light in the following statement respecting the "malignant demon." —"Among the hills in the Western parts [of China?] there exist beings in human shape, a foot or more in height, who are by nature very fearless. If attacked [or, offended], they cause men to sicken with [alternate] heat and cold. They are called *Shan-sao*. By thrusting bamboos into the fire, and producing a crackling sound the *Shan-sao* are frightened (away)."

In these two passages we have an explanation of the name by which the fire-cracker is known at the present day in China viz: *p'ao-chu*, or "crackling bamboo;" but they afford, in addition, what is apparently authentic evidence that so late as the sixth century gunpowder was still unknown even for the simplest explosive contrivances. Conjointly with the foregoing, moreover, and as explanatory of their meaning, a third passage is adduced in all the Chinese cyclopœdias, which refer it to a work said to be no longer in existence at present. This is the *Kai-wên-luh*, (App. *E*) or, as its name is printed in some literary catalogues (with more apparent correctness), the *T'an-wên-luh*, ascribed to Li T'ien, a writer who flourished about the close of the tenth century. It is here stated that "a neighbour of Li T'ien was bewitched by a *Shan-siao* 山魈; whereupon Li T'ien bade him make a crackling of bamboos, to the number of some tens of stems, in his inner courtyard on the night of the last day of the year, and at dawn, with the cessation of the sound, he was quiet and in peace."

In all these statements, the employment of a crackling sound is uniformly connected with the exorcism of a malignant demon; but two points here obtrude themselves upon our notice. In the first place, it is remarkable that the being in question begins to be heard of for the first time in the middle of the sixth century. Works of an earlier age, such as the *Shan-hai-king* (App. *F*) and Ying Shao's *Fung-su-t'ung-i* (App. *G*) contain no mention of the *Shan-siao*, nor—which is particularly noteworthy—does the latter of

(6) 於庭前爆火竹, yü t'ing ts'ien pao huo chu.

these two works, which dates from about 130 A.D., contain any mention of crackers or crackling bamboos, although other New Year's customs which are still in existence are recorded in its pages. It is not, in fact, until the time when a flood branching forth from the vast sea of Indian mythology had found its way into China, and had spread far and wide under the welcoming guidance of sovereigns whose chief glory is the patronage they afforded to the missionaries of Buddhism, that we meet with the earliest signs of such a superstition. That the name *Shan-siao* is of foreign origin appears more than probable, also, in view of the uncertainty prevailing with regard to the characters with which it should be represented; and this ambiguity is precisely what ensues as a rule when words, especially proper names, become naturalized in Chinese. The diversity of usage in this respect is fully exemplified in the only additional reference to the *Shan-siao* that the writer has succeeded in finding, viz., in a small work by Twan Ch'éng-she of the T'ang dynasty, who appears to have lived about the middle of the 8th century. The following passage, extracted from his *No-kao-ki*, (App. *H*) shews the various readings for the name of the "malignant demon:"—"The *Shan-siao* 山蕭 is also known as the *Shan-sao* 山臊. In the *Shên-i-king* [the last character] is written 操 *ts'ao;* and in the *Yung-kia-kiün-ki* 永嘉郡記 it is called *Shan-mei* 山魅. Another name is *Shan-lo* 山駱; and another is *kiao* 蛟. Some call it 'flesh-sprinkler;' others, 'flesh-heater.' It is also called the *Che-niao* 治鳥 or 'ruling bird,' and its nest is as big as a five-bushel measure. This it daubs over with mud, of red and white colours intermingled. If attacked, it has the power of summoning tigers (7) to destroy its enemies. It burns the dwellings of men. Its common name is *Shan-siao* 山魈."

The Chinese themselves do not appear to have pursued any investigation respecting the origin or meaning of the term *Shan-siao*, but, guided by the date of its appearance in literature and its foreign garb, we may, with some confidence, ascribe the belief in this demon to an Indian parentage. As regards the myth itself —although in reality unconnected with the purport of the present inquiry—it may be permitted to hazard the speculation that fever and ague, lurking as it did and still does in the swampy regions of Western China, may, by a very familiar process, have become embodied in the conception of a supernatural agency, and that the

(7) According to the Chinese scheme of physics, tigers have dominion or influence over the *West*.

fires which native wisdom or foreign counsel might suggest as a prophylactic device may have been invested with magical attributes either by teachers who thought it best to fortify sanitary precautions with a cloak of fetishism, or else by the inherited tradition of succeeding ages. However this may be, the idea of exorcism, dating, as has been already seen, as far back as the sixth century, has remained inseparably connected with the use of fire-crackers down to the present day. Among the quotations from poets of the Sung dynasty which the *P'ei-wên-yün-fu*, the Imperial thesaurus of K'ang Hi, preserves under the heading *pao-chu*, all turn upon this circumstance alone—being, indeed, evidently based on no other originals than the passages quoted above from the *Shên-i-king*, etc. Thus Su Tung-po (born 1036, died 1101, A.D.) writes in one of his poems: "*Pao-chu-king-lin-kwei*"—the cracker frightens off the demon from next door. And Wang Ngan-she, his celebrated contemporary, (born 1021, died 1086, A.D.), in a stanza descriptive of the New Year's ceremonies, writes: "*Pao-chu-shêng-chung-i-sui-ch'u*"—amid the resonance of crackers another year begins." Other poets of the same period have had recourse to the same idea (8).

There is nothing, certainly, in the language of even the poets of the Sung dynasty to imply that the crackers of their day were

(8) In the modern romance of the *Hung-low-mêng*, or Dreams of the Red Chamber, dating from the end of last century, an enigma is introduced the solution of which is "A Fire-cracker," with an obvious allusion to the magical attributes described above. It is worded as follows:

回	一	身	能
首	聲	如	使
相	震	束	妖
看	得	帛	魔
已	人	氣	胆
化	方	如	盡
灰	恐	雷	摧

Translated in corresponding doggrel, the following is its signification:

So great is my power that all demons and sprites I control—
Like thunder my voice, though my form, 'tis a mere shapeless roll!
Men tremble in sudden affright at my terrible sound,
Yet I'm ashes and dust ere the startl'd one turns him around!

It seems worthy of mention, moreover, that subsequently to an execution taking place at Canton in 1868 in a public square (for a special reason), the inhabitants of the locality were not satisfied until they had exorcised the ghost of the departed criminal by a protracted discharge of crackers.

more than the simple bamboos which earlier writers speak of, and if no further references could be discovered on this point there would be reason, perhaps, for doubting whether gunpowder played a part in the combustible their verses celebrate; but an additional passage in literature helps us to a glimpse of what may possibly be the actual era when gunpowder was introduced and was employed in the manufacture of fire-works. The cyclopœdias of reference which render such enormous service to a student of Chinese literature (9) contain a quotation from a certain work entitled *Wu-yüan*, (App. *I*)—or *De Rerum Origine*—of which it is difficult to assign the precise period, but which probably dates from the 14th or 15th century. The passage is as follows: "Hien Yüan (the Emperor Hwang Ti, whose semi-fabulous period is placed in the 27th century B. C.) was the maker of *p'ao* (ballistæ), and Lü Wang (another favourite hero of mythology, who flourished in the 12th century B. C.) made *ch'ung* (*i. e.* hollow tubes, sc. guns). Ma Kiün of the Wei dynasty 魏馬鈞 constructed *pao-chang* 爆仗 (crackling or exploding staves); and the Emperor Yang Ti of the Sui dynasty added thereto fire-works of gunpowder—*yih-i-huo-yao-tsa-'hi* 益以火藥雜戲." The above is all that Chinese literature has to shew, until within comparatively recent times, in connection with the supposed history of gunpowder and its uses—a terse and positive statement, the value of the latter half of which is impaired, it must be admitted, by the fabulous nature of its introductory assertions; but still affording indications that are worth the trouble of weighing. The mention of Hwang Ti and Lü Wang may be dismissed with the reflection that these two worthies are the traditional inventors *par excellence* throughout the course of Chinese history, and that the ascription to them of discoveries the origin of which is unknown has taken place in a multitude of cases. As regards the vastly more recent period embraced in the second half of the statement extracted from the *Wu-yüan*, there seems, on the other hand, to be a certain degree of obvious probability. The reign of Yang Ti of the Sui dynasty (603 to 617 A.D.) was one of those periods, not unfrequent in Chinese history, when the Empire and all its tributaries were ransacked to minister to the pleasures of an Imperial voluptuary, and when the minstrels, charlatans,

(9) Yet alas! what student has not groaned in spirit over the chaotic arrangements, the absence of proper indexing and cross-references, and, above all, the entire lack of information respecting the date and authorship of works quoted from in these vast compilations!

and necromancers of the adjacent countries were eagerly welcomed if they came with new amusements in their train. The same cyclopœdia *(Kwang-po-wu-che,* App. *J)* which enshrines the above quotation records also many curious particulars, in other sections, with reference to the magical performances of such wandering adventurers from India or Central Asia; and although a most careful search in every accessible work relating to the reign of Yang Ti has failed to elicit any corroboration of the statement given above regarding him, yet there can be little doubt that the author of the *Wu-yüan* had some such authority before him, or repeated, at least, some current tradition, which may have been based on the introduction during Yang Ti's reign of new devices in pyrotechny from beyond the Western frontier.

This seems the more probable in view of the fact that valid claims may be urged on behalf of India as the actual birth-place of the invention of explosive compounds. Various passages have been adduced in support of a belief that gunpowder was used in Indian warfare not only in periods which, though ancient, were still subsequent to the Christian era, but actually in the battle where Alexander's legions met with unexpected defeat; and it is at least allowable to surmise that those Brahmin chemists who—it is almost proved—inaugurated the search after the philosopher's stone and the *elixir vitæ* may have been the first to discover what secret forces are developed in the fiery union between sulphur and saltpetre. Ma Kiün, the inventor mentioned above, is fortunately again the subject of a notice in the *Kwang-po-wu-che,* where it is said of him that "in ingenuity and contrivance he surpassed every contemporary. He trained female musicians and dancing elephants; and even made wooden figures to beat drums and play on fifes. He constructed mounds upon which he made his wooden figures play at foot-ball and perform the sword exercise; and he also made them climb up ropes and stand head downwards." The period assigned to this ingenious craftsman preceded that of Yang Ti by about two centuries, and in the interval between the two we find precisely that era when Indian literature, religion, metaphysics, and science were thronging fast into China, bringing thought and fancy to enrich (it may be said, for the first time) the arid field of native formalism. The sudden appearance of the "fire-drug" at this period, therefore, may well justify the conclusion that very probably a knowledge of gunpowder and its uses was brought at the time referred to by native or foreign wanderers from the coun-

tries of India or Central Asia; and this being assumed as the true state of the case, it is not surprising if we find that writers of the T'ang dynasty (whose period embraces the three centuries subsequent to Yang Ti's reign) describe fire-works in the composition of which gunpowder can scarcely have failed to be used. It has already been seen above that Fang I-che refers to the pyrotechnic contrivances of the T'ang dynasty, and another authority is cited in the cyclopœdia entitled *Kih-che-king-yüan* (App. *K*) in the shape of a quotation from the work called *Yüan Shu-hi* (App. *L*) (believed to have been produced during that period) in the following terms: "Among the various kinds of fire-works *(yen-huo)* those that produce a noise are called 'resounding catapults;' those that rise in the air are called 'ascending fires;'—and those that neither make a noise nor ascend, but twist about on the ground, are called 'ground-rats.' They are made both hollow and solid, of different degrees of weight, and in the form of plants, human beings, &c. These are called *hwa-urh* 花兒 (flower children)." (10).

Additional references to some description of fire-work may very possibly be traced in other mediæval works; but in the quotations assembled above enough would seem to have been done to justify the hypothesis that has been formed—based, as it has been, not alone upon direct evidence, but also upon the negative testimony afforded by complete silence on the part of a large number of works that have been specially and carefully consulted. As regards gunpowder, therefore, it is concluded that—

1stly. No proof of its invention by the Chinese can be adduced.

2ndly. There is reason to believe that it may have been introduced from India or Central Asia about the fifth or sixth century of our era.

3rdly. The invention probably found its way into China in connection with the manufacture of fire-works for purposes of diversion; and supplanted at some unascertained period the practice of producing a crepitating noise by burning bamboos as a charm against evil spirits.

The inquiry pursued thus far respecting the period when gunpowder first became *known* to the Chinese, must now be prosecuted

(10) It should be clearly understood that the writer has no positive evidence for connecting the work above-quoted with the period of the T'ang dynasty. Its name appears in none of the literary catalogues accessible to him, and it is by a mere guess, therefore, founded on various incidents, that he assumes its date.

in its second division, viz: with reference to the date of the first *employment* of gunpowder in the operations of warfare. As has already been observed at the outset, the early records of the Chinese contain no passage whatever affording reason to believe that gunpowder was used in any form during the wars that took place before the Christian era. In the passage already quoted above from Chao Yi's Miscellanies, our attention is directed to the cause that has given rise to a contrary belief, viz., the mention in history of engines for launching projectiles, which, by a confusion of terms, have been too hastily regarded as actual cannon. This misconception is apparent, for instance, in one of the latest popular works of reference,—Chambers' Encyclopœdia—in which, in vol. IV., published in 1862, under the heading FIRE-ARMS, it is stated that "in 618 B.C., during the Taing-off [sic] dynasty, a cannon was employed bearing the inscription: 'I hurl death to the traitor, and extermination to the rebel.' This must almost necessarily have been of metal." (11). To indicate the ground-work of this error is an easy task. Were other evidence wanting, etymology would suffice for the purpose of shewing that the designations of *cannon* and *ballistæ* are absolutely identical, and that one might with equal justice infer the use in modern warfare of the latter engine as deduce from the testimony of language the ancient employment of guns resembling those of the present day. We are accustomed, in Chinese, to the word *p'ao* as signifying a cannon: but whence do we derive this term? The dictionaries shew that the ordinary form in which the character is written, viz. 砲, implying the idea of "a stone wrapped-up," is a modification of the original symbol, viz. 礮, which suggests "a stone coming in collision with a horse." This character was first used, it would appear from K'ang Hi's dictionary, by Chang Yen 張晏, who flourished as a writer during the Three Dynasties (San Kwo), and who must therefore have lived circâ 250 A.D. Commenting on a passage in Sze-ma Ts'ien's History, Chang Yen remarks that "in Fan Li's art of war (B.C. 500) there occur 'flying stones' of weight of 12 *catties*, which were propelled from machines and reached a distance of two hundred *pu* (about 400 yards). This was the origin of the *p'ao*." We shall see farther on how these warlike engines gained ground in Chinese

(11) The same article contains the following erroneous statement: "The most ancient records of China shew that, when they were written, fire-works were well known, several hundred years before the Christian era."

warfare, and how in process of time reasons arose which explain the occasional—but etymologically unjustifiable—substitution of the radical "fire" (as in 炮) for that of "stone" in writing the character *p'ao*.

Chao Yi, in the dissertation already quoted, beside adducing Chang Yen's mention of the ancient *ballistæ*, brings forward also from the History of the Three Kingdoms (which was written about A.D. 350) a passage stating that "Yüan Shao threw up mounds of earth and high towers in order to attack Ts'ao Ts'ao with his archers; whereupon the latter made use of 'thunderbolt carriages' (12) to discharge stones, with which he destroyed the towers Yüan Shao had constructed." From this period downward, the mention of machines for discharging stone projectiles becomes more and more frequent; *e. g.* we read that Li Kwang-pi employed machines at the defence of T'ai Yüan (about 750 A.D.) enabling him to project enormous stones which, in falling, crushed scores of the enemy at one time. In later centuries, similar notices occur in profusion; and thus, as Chao Yi observes, "the art of battering, in successive ages, appears to have been principally confined to the launching of stones with the help of machinery; but the use of fiery projectiles *(huo-p'ao)* certainly dates its commencement from the period of the Southern Sung dynasty, the Kin, and the Mongols (*i. e.* the latter half of the 12th century). The historians of the Sung period recount that Yü Yün-wên, at his battle at Ts'ai She (near Nanking), (13) threw thunderbolt projectiles, which were made of paper filled with lime and sulphur. When these fell into the water, fire leapt out from them, the paper burst, and the lime diffused itself in a dense vapour, which blinded both men and horses, thus causing defeat to the enemy. Again, Wei Shing invented [or, originated the use of] projectile carriages *(p'ao-ch'ê)* from which he launched 'fire-stones' to a distance of 200 *pu* (400 yards). In the manufacture of his fire-drug, nitre, sulphur, and willow charcoal were employed (14). This was the origin of the pyrotechnics in vogue in modern times."

(12) 霹靂車, *P'i-li-ch'ê*. The term *p'i-li* is defined by Morrison as "the shaking effect of a clap of thunder."

(13) Yü Yün-wên was comptroller of the Sung armies in A.D. 1161, and taking command at a moment when the Kin Tartars attempted to cross the Yang-tsze, defeated them in a naval engagement at Ts'ai She.

(14) Morrison, in his "View of China," Macao, 1817, p. 21, also quotes the above passage in relation to Wei Shing.

Wei Shing was a gallant leader of the Sung armies during the middle of the 12th century. He won his chief distinction in A.D. 1161 and 1162 through the recapture and subsequent defence of Haichow during the warfare with the Kin Tartars, and was killed in action A.D. 1164. We have thus a definite era alleged for the introduction of combustibles embodying the materials of gunpowder, and it now remains to investigate other sources of information. A vast storehouse of antiquarian lore presents itself in the work entitled *Wu-pei-che* (App. *M*)—equivalent to *De Paratu Militari*—an immense compilation in eighty large 8vo. volumes, containing 240 *kiüan* or books, which was published in 1621 A.D. by a writer named Mao Yüan-í. A general idea of its scope may be gathered from a brief summary of the sections into which this work is divided. Commencing with 18 books reproducing the most celebrated military treatises of antiquity—the works of Sun Tsze, Wu Tsze, the San Lio, Liu Tao, &c.—it devotes 33 more to excerpts from military history, which are followed by 41 on discipline, martial exercises, and tactics, with 53 on the material of war, beside disquisitions on grain transport, coast defence, and foreign relations. The concluding 95 books are almost wholly given up to treatises on military divination; and the value of the whole work is enhanced by abundant illustrations and diagrams. So important is this compendium of the art of warfare considered that it was placed during the early reigns of the present dynasty in the category of prohibited works, no private individual being authorized to possess a copy—though this prohibition, like so many others in China, does nothing more than enhance the cost of the forbidden article. It will be readily seen that the sections on military history and war material should contain much valuable matter with reference to the subject of the present inquiry, and such in fact is the case. The historical excerpts commencing with the period of the Han dynasty and brought down to that of the Yüan furnish in their earlier portions a mass of negative testimony as regards the use of explosive compounds in warfare prior to the tenth century; and on the other hand, when this period is reached, particulars are furnished which enable the gradual development of military pyrotechny to be closely followed during several hundred years. What appears to be absolutely the earliest mention of a fiery compound used in warfare, occurring in Chinese literature is found in book 43 of this work, among extracts relating to the warfare of the distracted period known as that of the Five

Dynasties, which intervened between the downfall of the T'ang and the rise of the Sung dynasty. At this epoch, China, broken up into from five to ten rival kingdoms, was the scene of unintermitting warfare during more than half a century, and infected with her own excited condition the adjoining nations of Central Asia, of whom more than one was drawn in as a partner or an adversary in the prevailing contests. Alliances were negotiated, interchanged, and broken with all the frequency and ardour that characterised the warlike diplomacy of a kindred description in mediœval Europe; and there can be little doubt that a time like this was highly favourable to the spread of destructive inventions. Thus, as already stated, we find in the *Wu-pei-che* an extract from the national historians in which a substance resembling "Greek fire" is for the first time mentioned, in reference to this period. The passage is as follows: "The sovereign of Wu sent to Apaoki, the sovereign of the Kiehtan (Liao) a furious fiery oil, which oil, on being set alight and coming into contact with water, blazed the more fiercely. It could be used in attacking cities. Apaoki was filled with joy, and took at once a chosen force of horsemen with whom he was minded to attack Yewchow; but his queen, Shulü, laughed at him, and said: 'What man has ever bethought him of attacking a kingdom with oil? Is it not better rather to take three thousand horsemen and lie in wait on his borders, and lay his country waste, so that the city shall be without food? By this means before a few years are gone they will be brought to straits—what boots this hurry and rashness? Think you not you may be worsted, and be mocked at by China, and our own people may fall away?' Therefore he went no further in this design."

The above passage is included also in the commentary of the *T'ung-kien-kang-mu*, (App. *N*) under the reign of Chêng Ming of the Liang dynasty, where the invasion of Northern China by the Kiehtan is duly chronicled. The time was A. D. 917; and at this period the sovereign of Wu, referred to as the sender of the fiery oil, had fully inaugurated his splendid rule over the region occupied by the modern province of Chekiang. Hangchow, his capital, had become the richest and most magnificent city of the Empire, and was undoubtedly the resort of numerous Indian and Arab adventurers, with whom subjects of the Byzantine rulers may not improbably have mingled. It is at least, a remarkable coincidence that only a few years before this epoch the emperor

Leo introduced, it is recorded, (15) "fire-tubes" for use in conection with Greek fire; and it is by no means unlikely that such an invention may have been brought to Hangchow by one or more of the roving foreigners from the West, and gladly acquired as a new resource in warfare; whilst, on the other hand, it is tolerably plain, from the passage above quoted, that its use was previously unknown to the warlike neighbours of China on her Western frontier. Be this as it may, the period of the Five Dynasties is that in which we find the greatest advances made in the use of numerous contrivances for use in warfare; and although history has preserved no continuous record of the gradual progress that was achieved, it is nevertheless evident that invention and improvement were steadily at work. The next great step to which we are led, after chronicling the introduction of the "fiery oil," brings us to the period of the Nü-che Tartars, whose rulers, supplanting the Kiehtan dominion, began in the 11th century increasingly to press upon the North-western regions of China, where they annexed by degrees enormous tracts of territory, and founded a dynasty with the title of Kin, which maintained during a century or more almost unintermitting warfare with the decaying House of Sung. That a compound practically identical with the modern gunpowder was used during the engagements which took place between the contending armies of these rival powers during the middle decades of the 12th century seems to be clearly ascertained, although the propulsive forces of the new agent remained as yet unknown; but whether the invention first gained ground among the Chinese forces or with their Northern enemies is a question the solution of which cannot be ventured upon. As regards direct testimony, such evidence as we possess assigns the distinction of the first employment of "villanous saltpetre" to the Sung commander Wei Shing, as above noted.

At this point of fusion between the ancient and modern systems of warfare, it may be well to halt and briefly examine the various engines and contrivances which the Chinese had previously elaborated for warlike purposes. The records and engravings of the *Wu-pei-che* here come to our aid, and supply an immense list of offensive and defensive weapons or machinery. In the ponderous *chwang-ch'ê* 撞車, consisting in a huge beam terminating outwardly in a conical head, and slung from a massive framework

(15) Between A.D. 890 and 911. Chambers' Encyclopœdia, art. Firearms.

which moved on low wooden wheels, we may recognize the exact counterpart of the Roman or Grecian battering-ram; but this engine seems to have been less used than the *p'ao-c'hê* or slings already adverted to above, of which no less than fifteen varieties are depicted in the *Wu-pei-che*. They appear to have corresponded in all essential respects with the *lithoboloi* of the Greeks and the *ballistæ* of Roman warfare, and to have consisted in a beam working upon an axle supported by a massive wooden framework, and attached at its outer extremity to a rope the farther end of which was fastened by thongs to pegs at some little distance from the machine. Upon this rope a pad of leather was fixed, affording a resting place for the missile about to be discharged. The inner extremity of the beam was furnished with a number of ropes upon which the working-party hauled, giving leverage sufficient, it would seem, to project the stone with great force from the pad on which it rested. One of these engines, mounted on wheels, is shewn in Fig. I annexed; (16) but other kinds, corresponding to

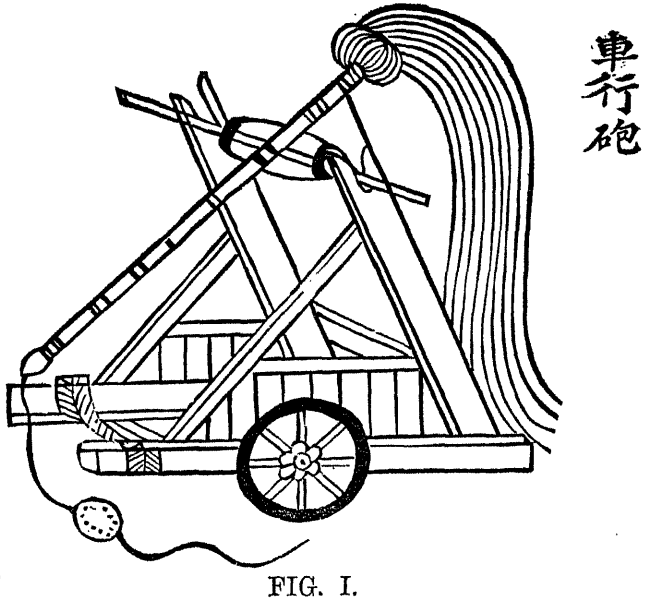


FIG. I.

(16) The accompanying illustrations are reduced from the plates in the *Wu-pei-che*.

garrison artillery, were simply built up on the walls of cities, whilst others, again, had several beams working simultaneously within a single framework. Of the simplest description the *Wu-pei-che* states that forty men were required to work it, with one as "captain of the gun" to govern the discharge. It threw a stone weighing 2 *catties* (2⅔ lbs.) a distance of fifty *pu* (about 100 yards). The larger *ballistæ* were much more powerful than this, as for instance one which discharged missiles from two pads at once, worked by one hundred men, launching stones of 25 *catties* (about 33 lbs.) to a distance of 80 *pu* (160 yards). It is not, however, in the *ballistæ* only that we are able to trace a similarity between the Chinese devices and those of the Greeks and Romans; the incendiary projectiles eventually launched from these machines bore a strong resemblance to the fireballs, made of tow saturated with oil or resin, that were cast by the Grecian slingers, whilst the mantlets of wood or leather hung over city walls to defend them from the assault of the battering ram, the grappling irons used in harassing stormers, and the huge moveable towers under cover of which a besieging party advanced with impunity to the foot of an enemy's wall, may be seen delineated in the *Wu-pei-che* in precisely the forms that we find described by the classical military writers.

To return to the immediate subject of the present paper—from engines for casting heavy masses of stone to the propulsion of incendiary projectiles by similar means was an obvious step, and accordingly it is found that the *p'ao-ch'ê* or projectile carriages assumed ere long the title of *huo-p'ao* or fire-launchers. In Vol. 41., *kiüan* 122, the *Wu-pei-che* presents an illustration of which a copy (Fig. II) is annexed herewith, under the title *Sung-huo-p'ao*, or the fire-launcher of the Sung dynasty. The descriptive passage appended simply states: "This engine cast various incendiary missiles, such as fire-balls, jars, spears, &c. This was the fore-father of all guns *(p'ao)*." The first mention of its use occurs, apparently, in a description of the defence of K'ai-fung Fu against the assaults of the Kin by Li Kang, the celebrated Minister of K'in Tsung of the Sung dynasty, A.D. 1127, of whom it is recorded that he constructed ballistæ which launched fire-balls, besides preparing stores of incendiary oil, &c., &c. In addition to the above-mentioned engines, he had machines for discharging flights of arrows from enormous cross-bows,—the "catapults" of the Romans —to which practice, it may be noted, the common phrase in use



FIG. II.

at the present day to describe a "volley" or heavy discharge of artillery, viz., *she-shih-ping-fa* 矢石並發, or, "darts and stones discharged simultaneously," may no doubt be traced. Li Kang has himself bequeathed a very interesting description of his defence of K'ai-fung Fu, under the title of *Tsing-kang-chwan-sin-luh* (App. *O*) but although he incidentally mentions the use of his *p'i-li-p'ao* or thunderbolt projectiles he lays no great stress upon their use and gives no precise clue to their nature. He was, as will be noticed, the contemporary, though the senior, of Wei Shing.

Numerous passages might be quoted from the minor historians of this period with reference to the use of incendiary projectiles in various forms, but they are superfluous as regards the object of the present inquiry; and it is sufficient to note that they played a conspicuous part in the warfare carried on during the 12th and 13th centuries between the Chinese, Kin, and Mongols.

That the armies of Genghis Khan and his immediate successors, during their invasions of Northern China, were unacquainted with the use of gunpowder and even of less recondite devices in military pyrotechnics, may be inferred from numerous passages in Chinese literature; but the Kin Tartars, on the other hand, who first bore

the brunt of their lust for dominion, undoubtedly employed a variety of such means in the course of various sieges. Thus during the defence of Loh-yang, when siege was laid to this city by Subutai, the lieutenant of the son of Genghis in 1232 A.D., we find from a record of the Sung historians which is copied by the annotators to the *T'ung-kien-kang-mu* and embodied also in the *Wu-pei-che* with even greater fullness that "the Kin at this time had *hyo-p'ao* called *chên-t'ien-lui* 震天雷 (Heaven-quaking thunderers). They employed iron vessels filled with a drug, which they lighted with fire, and these when launched forth and set blazing, gave forth a sound like that of thunder, which could be heard beyond the distance of 100 *li* (about 33 miles!). Their effect was felt over an area of half a *mow* (or about the twelfth part of an acre). No armour could withstand their shock. The Mongols constructed arched ways, covered with bullock's hide, which they pushed up to the foot of the walls in order to undermine them, the hollow being of sufficient size to allow men to pass underneath, and the garrison could do nothing against them, until a man among the *Kin* brought forward an invention which consisted in suspending the 'Heaven-quaking thunderers' by iron chains and letting them down into the places excavated, where the fire burst out from them, utterly destroying every fragment of the bullock's hides and of the men they sheltered. They had also 'flying-fire spears' to which the drug was applied, and which, on being ignited, burnt forward with a sudden flame to a distance of ten paces and upwards, so that no one durst approach them. The Mongols feared nothing but these two devices."

The *Kih-che-king-yüan* cyclopœdia extracts a passage from the work entitled *Pai-pien* 稗編 (printed in 1581, but compiled somewhat earlier) which describes these primitive shells. It states: "On the walls of Si-ngan there was long preserved [an] iron *p'ao* 砲 called *chên-t'ien-lui*, which in shape was like two cups joined together. At the top there was an orifice which barely allowed the finger to penetrate. This [description of weapon] has not been used in the army for a length of time: it was what the Kin employed at the defence of K'ai-fung Fu." The author of this passage proceeds to quote the description of the "Heaven-quaking thunderer" from the Sung historians, as translated above. It is impossible to doubt that the *explosive* qualities of gunpowder had now been fully ascertained and utilized, and in the fire-spear, which "burnt, or threw fire forwards," the first glimmering of its projectile capabi-

lities seem to have been recognized. The accompanying illustration, *Fig.* III., represents this weapon as depicted in the *Wu-pei-che.*

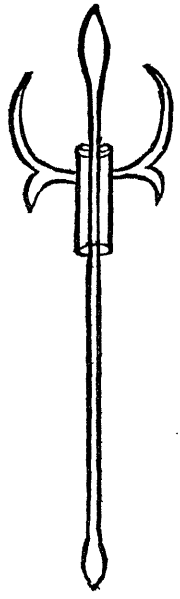


FIG. III.

After the period of Wei Shing, and throughout the second half of the twelfth century, the notices of incendiary arrows and similar devices grow more and more conspicuous in history. We learn for instance that in executing the daring achievement of breaking the blockade of Siang-yang Fu, and introducing provisions into the beleaguered city at its utmost need, Chang Shun, the devoted hero of this exploit, had "fire-spears and fire *ballistæ*" on board the boats with which he forced a passage through the Mongol lines. This was in 1272, in the fifth year of the siege, but the relief afforded by this dashing exploit delayed only for a short time the inevitable issue. Siang-yang and its suburb, Fan Ch'êng, fell in 1273, and it is interesting, although not entirely relevant to the present inquiry, to note that the capture of Fan Ch'êng (which entailed the surrender of Siang-yang) is stated in all the Chinese histories to have been achieved by means of mechanical devices for projecting stones, as Marco Polo also observes, although the

credit of inventing these engines is attributed to other persons than the "two Venetian brothers," whose "reputation and credit," says Messer Milione (17) were increased through this prompt result of their ingenuity, in the opinion of his majesty and of all his courtiers.

Although we have at length reached a period when the composition and forces of gunpowder must, it is evident, have been understood, some time will still elapse before we are able to detect any marked advance in the methods of its employment. Throughout the Mongol (Yüan) dynasty, embracing the greater portion of the 14th century, no mention is to be found of any improvement on the inventions of an earlier age; but the first sovereigns of the Ming dynasty are known to have devoted serious attention to the use of gunpowder in warfare. Chao Yi, in the dissertation already quoted from, recalls the fact that at the battle of Tung Ch'ang (in 1401) the armies of the Prince of Yen, (afterwards the Emperor Yung Loh), were defeated with great slaughter owing to the use of fire-weapons; and he further gives prominence to the use of combustibles by the General Chang Fu, in his campaign against the Tonquinese in 1407. Of this transaction the historians of the Ming dynasty relate that Chang Fu, making a nocturnal assault upon the city of Topang, was met by a charge of elephants; but that he routed these animals "by means of horses disguised as lions, which rushed forward to the attack, having fire-weapons [which were called] *shên-ki* (*i. e.* divine enginery) attached to their sides." The *Wu-pei-che* gives several illustrations of devices of this kind, which appear to have consisted in attaching tubes filled with inflammable materials to the bodies of horses and even of oxen. The use of the term *shên-ki* 神機, applied by the Ming historians to these contrivances, would appear to have been used retrospectively, as the designation is expressly stated to have come into use at a later period than that of Chang Fu's invasion of Tonquin. The term, indeed, seems to have entered the Chinese language as one of the results of that invasion, and there is good reason for be-

(17) *Travels of Marco Polo*, Marsden's Translation, Book II, ch. 62, p. 489. In the note to this passage Marsden cites the narrative in De Guignes' *Hist. générale des Huns*, where M. Polo's story is fused with the Chinese account, and also extracts the notice from De Mailla's *Histoire de la Chine* (the translation of the *T'ung-kien-kang-mu*), mentioning the construction of the ballistæ used on this occasion. A discussion of the question here would be out of place—but it may be noted that the French translator has very incorrectly rendered the passage from the Chinese historian in relation to these engines.

lieving that China obtained at this period, and from her vanquished enemies, the two most powerful developments to which gunpowder has attained as a warlike engine, viz: the *rocket* and the *cannon*. In its section on warfare, the History of the Ming dynasty, quoted from by Chao Yi, states specifically that "on the invasion of Cochin-china during the reign of Yung Loh (1407 A.D.) the *shên-ki* method of spears and guns *(ts'iang-p'ao)* was acquired, and the *shên-ki* brigade was formed for the purpose of practising with them. For the largest weapons, carriages were used; and for those next in size, and the smaller ones, frames, posts, or staves were employed. Those which were used on carriages correspond to the great guns of the present day (18th century), whilst the remainder answered to our modern light-artillery, and those which were used with staves were the modern fire-locks." Chao Yi adds as a commentary on the above passage: "It is thus seen that in the reign of Yung Loh fire-arms had already been obtained, but they were not permitted to be known publicly. Although in 1422 the proposition of Chang Fu for the placing of guns *(p'ao)* at the Ta T'ung and other frontier passes for defence against the enemy was acceded to, yet [these] formidable weapons were not allowed to be seen, and the Emperor set great store by them."

The authors of the Ming History seem to have felt assured that the new kinds of weapon obtained in Cochin-china were positively the originals of the modern cannon and fire-lock; but, although this is not essentially improbable, yet it must be admitted that the authority on which the statement rests appears inadequate. The *Wu-pei-che* affords no corroboration on this point, but as regards the acquisition of a form of rocket, it refers specifically to the same period. Among the illustrations it devotes to various forms of fire-arrows, a weapon is included under the designation *shên-ts'iang* 神鎗, which is shewn as consisting in a tube having an arrow in its centre, with the head of the arrow projecting in advance of the tube itself, the whole fitted upon a stick or pole which terminates in a lozenge-shaped point. The descriptive text appended is as follows: "This is what was obtained in Cochin-china. At the base of [the weapon] there is a *mu-sung-tsze* (18), and leaden balls and other objects are added also. Its great advantage lies in the use

(18) 木送子—*lit.*, wooden dispatcher? The writer is unable to guess at the meaning of this term, unless the pole at base of the tube be meant by it.

of iron-wood, which is both heavy and of great strength. When discharged, it will reach a distance of 300 *pu* (600 yards)." The author of this description seems to have had but a vague idea of the original object itself, and probably drew his information from very meagre traditionary sources. A similar lack of detail marks many of his attempts at pourtraying ancient weapons, and not a few among them are evidently mere impossible fancies. As regards the fact, however, that fire-arms depending for their efficacy on the *propulsive* agency of gunpowder were acquired in Cochin-china during the reign of Yung Loh, there seems no reason to reject the statement; but this sovereign enjoyed, undoubtedly, other opportunities of obtaining a knowledge of the potent uses to which gunpowder might be applied. His envoys visited every part of the Malay archipelago, penetrated to the Court of Delhi, joined in the pilgrimage to Mecca, and brought back most minute reports of all the wonders they had encountered during these explorations. Another embassy from the same sovereign waited in 1408 and again in 1417 on Sultan Shahrokh at Herat; and in the letter presented by the former of these two missions to Shahrokh, the Emperor acknowledged his Mongol cousin's courtesy in despatching "an ambassador to do Us homage, and to present Us the rarities, horses, and choice manufactures of [the] country" (19). It may be, therefore, that the inventions of the Arabian philosophers, which were doubtless known by this time in Persia and the adjacent countries, may have reached the Court of China among the rarities presented by Shahrokh Mirza, at the same period with the invasion of Tonquin by the armies of Yung Loh. The jealous secresy imposed by this sovereign in reference to the fire-arms or cannon of which he had become possessed, as already indicated above, shews plainly how rare and novel the contrivances were even at this comparatively recent period; and as late as A.D. 1440 the same system was maintained during the reign of one of his successors. To quote again from Chao Yi:—"In the 6th year of Chêng T'ung, Hwang Chên, a military officer holding command on the frontier, organized a factory at Siüan Fu (in the Province of Chih-li) for making *shên-ch'ung* 神銃 (divine guns); but his majesty, fearing that if fire-arms were manufactured away from the Capital the secret would become divulged, gave orders for the abandonment

(19) Account of Embassies and Letters, &c., between the Emperor of China and Sultan Shahrokh, by Sir William Chambers.

of the project. Thus previously to the reign of Chêng T'ung, fire-arms were not known to the public; and it was only after Kia Tsing's reign commenced (A.D. 1422) that they first became introduced in the army."

We have thus at length reached the final stage of this long inquiry, and the result arrived at is that China, instead of being the first among nations to recognize the powerful agency ef gunpowder, was in reality almost the last to become familiar with its propulsive forces. The reign of Kia Tsing, referred to above as the epoch when the knowledge of the use of fire-arms became first widely introduced, immediately succeeded the period when the vessels of European pioneers reached the coast of China, and with their arrival the science of modern gunnery was brought into prominent notice. The first advent of Portuguese mariners at Canton took place in 1517, and the cannon carried on board their ships received careful notice from a contemporary writer, who has bequeathed to posterity his observations of these novel weapons. Through some confusion of terms, it is evident, the Portuguese artillery received the name of *Fu-lang-ki* or "Franks," which was the title bestowed, no doubt, on the foreigners themselves by their Arab or Malay interpreters. Ku Ying-siang, the writer abovementioned, whose remarks on the subject are extracted in the *Wu-pei-che*, observes that: "*Fu-lang-ki* is [in reality] the name of a country, and not of cannon..... The guns *(ch'ung)* of the Portuguese were of iron, five or six *ch'ih* (six to seven feet) in length, broad in the girth and with elongated necks. They were perforated longitudinally, and five small barrels were used, which were loaded with powder in succession and placed inside the body of the piece, from which they were shot off (20). They (the guns) were hooped in addition with timber in order to guard against bursting. The foreigners' vessels had four or five of these guns on either side of their lower decks." The *Wu-pei-che* appends an illustration of the cannon referred to, represesenting what is evidently identical with the "calivers" of European warfare in the 16th century, under the title "Fu-lang-ki;" and several varieties of the same arm are also figured and described in its pages. A portable weapon resembling the modern match-lock is further delineated, sharing with

(20) Since the above was written, a mention of cannon with five separate chambers, in use in England during the 15th century, has been met with. See Sir Sibbald David Scott's "British Army," London, 1868, Vol. 2, p. 217.

the larger guns the designation "Fu-lang-ki;" and a smaller kind is depicted in the illustration a copy of which is annexed—Fig. IV



FIG. IV.

—under the title of *Tsao-hwa-siün-hwan-p'ao* or "wonder-working pivoting gun."

It would appear that the Japanese of the 16th century were equally eager with their descendants of the present day to avail themselves of foreign inventions, particularly of a destructive kind, as we learn that they made use of fire-arms on a considerable scale very shortly after the first arrival of the Portuguese among them; and Chinese writers admit that for the manufacture of improved weapons of this kind their countrymen were indebted to Japanese ingenuity. Guided by a notice in Chao Yi's dissertation, we find that Lang Ying, a writer of the latter portion of the 16th century, in his valuable Miscellanies entitled *Ts'i-siu-lui-hao,* (App. P.) observes, *(kiüan* 45*)*, in connection with various inventions derived from Japan that: "As regards the 'bird-mouth' wood guns, the Japanese invaded Chekiang during the reign of Kia Tsing, and on some of their number being taken prisoner, possession was obtained

of their weapons, and they were made to give instruction in the method of manufacturing them." In the term "bird-mouth"—*niao-tsuei*—applied to fire-arms, and probably used with reference to the bell-shaped muzzles of the early blunderbusses, we may perhaps trace the origin of the term *niao-ts'iang* or "bird-gun" commonly applied at the present day to all description of musket. The term "wood" doubtless has reference to the stock of the weapon, which was absent in the earlier Chinese match-locks.

As we have now witnessed the full introduction of gunpowder and fire-arms, in their modern forms of application, among the Chinese, nothing more remains to chronicle beyond some of their improvements on the earliest contrivances. By the beginning of the 17th century numerous devices seem to have come into vogue, among which the *ta-tsiang-kiün* &c., or heavy cannon of small calibre and mediocre utility employed against the encroaching Manchows, are the most widely known. In the *Wu-pei-che* we find illustrations of nine kinds of match-lock, beside fourteen other weapons, more or less fantastic, for vomiting fire. One of these consisted in tubes fastened to each extremity of poles arranged in the form of a cross, which the artillerist, it would seem, was instructed to whirl around him in the centre of a mêlée. How ignition was to be effected is not explained. Fourteen kinds of explosive vessels are also depicted, in the shape of flasks, globes, grenades, &c. Of rocket arrows, numerous designs are given, some of which are obviously no more than crude and impracticable fancies. Of cannon, some dozen or more varieties are represented, beginning with the caliver already described, and extending to the unwieldy masses of metal, embedded in heavy trucks, to which the title of "great commander" *(ta-tsiang-kiün)* was given. In Fig. V one

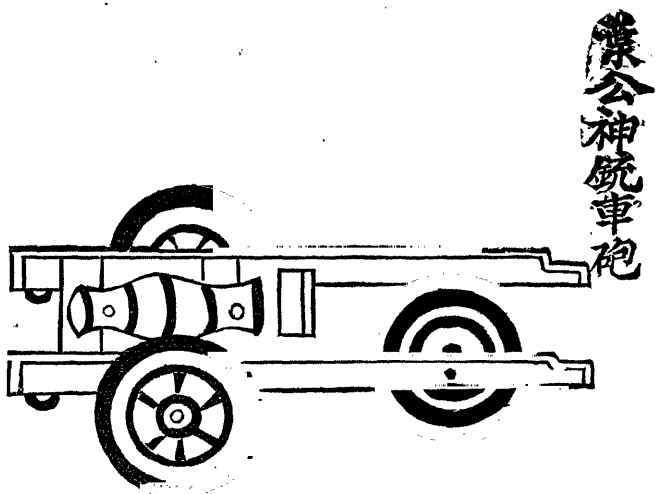


FIG. V.

of the smaller varieties of these pieces of artillery is depicted. The *hu-tsun-p'ao*, or "tiger-crouching gun," figured in Plate VI, will

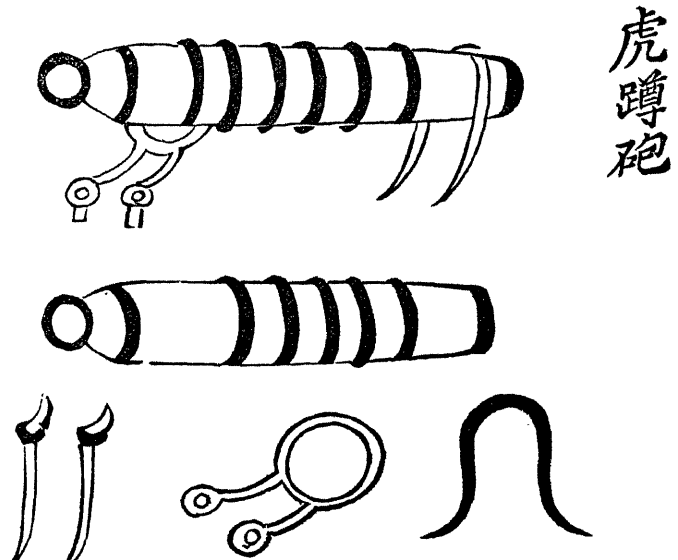


FIG. VI.

be understood at a glance. In Fig. VII, a weapon is represented,

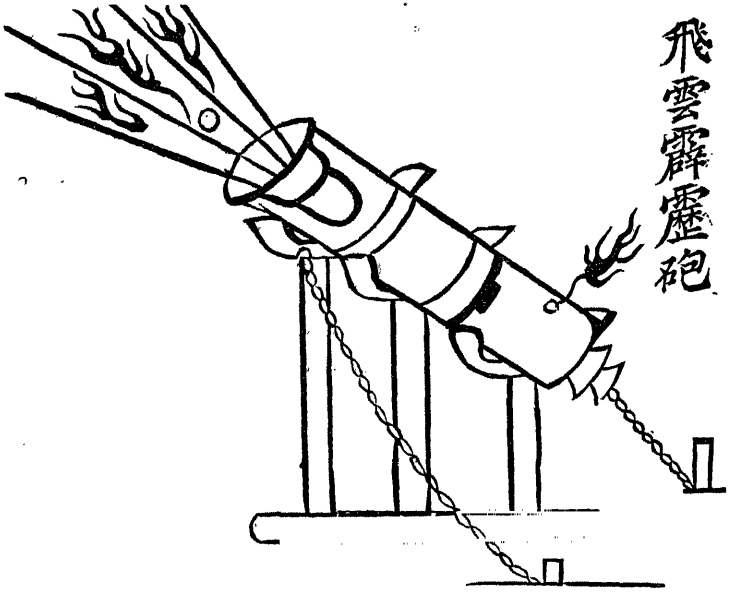


FIG. VII.

which bears a strong resemblance to those known in Europe during the 17th century as "bombards," but its use appears to have been confined to the vomiting of offensive and stifling compounds, for which many recipes are given in the *Wu-pei-che*. The designation of this weapon is given as "the flying-cloud thunderbolt gun."

As regards the construction and use of rockets, the *Wu-pei-che* leaves no doubt existing that at the time of its compilation (*i. e.* early in the 17th century) the Chinese were fully acquainted with the propulsive powers of gunpowder, and the numerous engravings in which weapons of this kind are depicted plainly indicate the progress from a mere arrow, carrying a tube filled with combustibles attached to its stick, to the genuine rocket of modern pyrotechny. In Fig. VIII we see the two forms side by side, as they are represented in the *Wu-pei-che*. Two fire-arrows, evidently intended to be shot from bows or catapults, are here accompanied by what must have been a rocket, containing its own means of propulsion. No descriptive details, unfortunately, are appended to this interesting plate. We may observe, however,

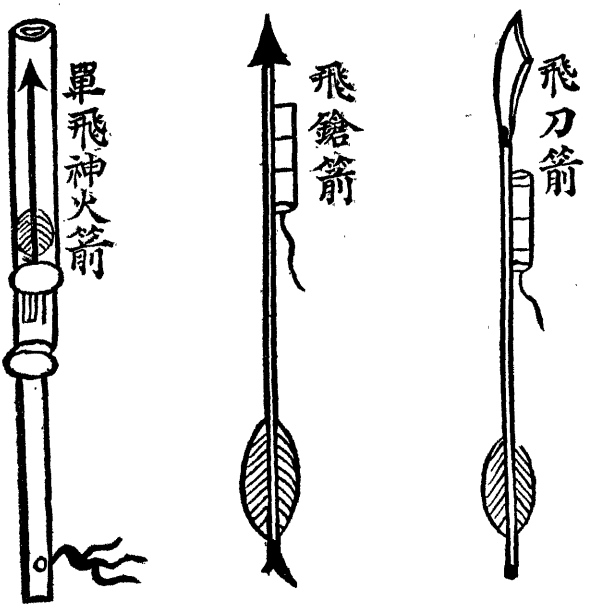


FIG. VIII.

from the drawing, that the idea of an arrow still lingered as that of the actual destructive agent, although its utility had in fact given way before a mightier agent, in the same manner as physiologists detect in the frame of the higher animals organs which, although undeveloped and apparently unessential, nevertheless represent functions which in lower or perhaps extinct genera were employed in full activity.

A closer approach to the modern form of rocket is shewn in the weapon represented in Fig. IX. This is entitled the "invincible bamboo commander," and was, as may be gathered from the description annexed to the plate in the *Wu-pei-che*, in every essential particular a weapon corresponding to that introduced into the British army by Sir William Congreve. The directions given for its manufacture are minute and precise, but are too voluminous to be more than epitomized here. A stout section of bamboo was to be taken, and all the joints except the last one were to be drilled through. A Tube was thus prepared, within which gunpowder was to be closely rammed down, the base having

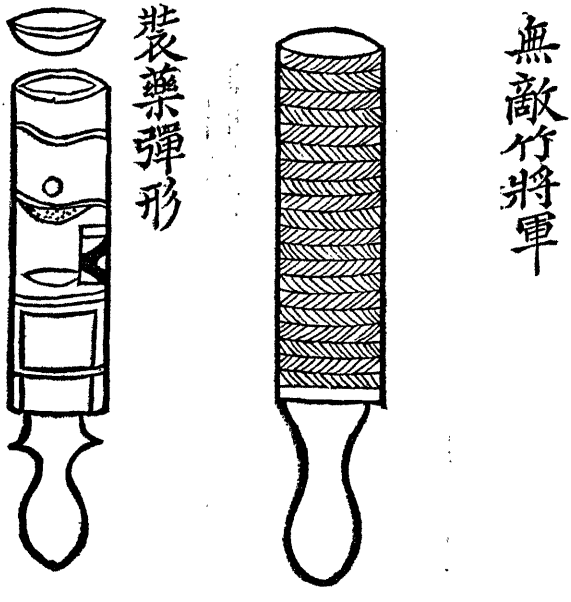


FIG. IX.

first been strengthened with a wad of clay, surmounted by a round plate of metal, above which a perforation was to be made, to serve as vent. Through this hole four or five inches of slow-match were to be introduced. The powder with which the tube was filled was to be protected by a wooden plug and an iron disk, the latter having circular holes drilled through it. At the base of the tube a handle was to be inserted, and the whole was to be tightly bound round with twine. The range of this projectile is stated to have been 700 to 800 *pu* (or about 1,500 yards); and its effects are alleged as being most terrific and destructive.

As regards the manufacture of gunpowder, the *Wu-pei-che* does not afford any precise instructions, although various formulas are given for the preparation of suffocating compounds, &c. The nearest approach to a description of gunpowder as at present fabricated is the recipe given for producing a spattering fire from tubes to be attached to common arrows. The particulars of this are as follows:

	catty.	*tael.*	*mace.*
Saltpetre	1		
Sulphur		4	5
Pine Charcoal.....		4	8
Cinnabar		1	6

(*N. B.*—The catty is nearly equivalent to $1\frac{1}{3}$ lb.)

One of the suffocating compounds is described as consisting of nitre and sulphur, camphor, resin, orpiment, and arsenic; and others were to be manufactured from a large variety of vegetable drugs mixed with copperas, borax, &c.

To resume in brief the results of the entire inquiry as they present themselves to the writer's mind, it may be stated that—

1stly—Gunpowder probably became known to the Chinese—though to a partial extent only, and from foreign sources—about the period 500-600 A.D.

2ndly—Projectiles of an inflammable nature employed in warfare were thrown originally from *ballistæ*, the name of which being identical with that attributed to the modern cannon has led to a misconception with respect to the early use of the latter weapon.

3rdly—No evidence exists of the use of gunpowder as an agent in warfare until about the middle of the 12th century; nor was it used, at this period, with any propulsive effect.

4thly—The reign of the Emperor Yung Loh, during the first quarter of the 15th century, is probably the period to which a knowledge of the propulsive effects of gunpowder on the part of the Chinese must be assigned.

Such are the conclusions at which the writer, after consulting such sources of information as are accessible to him in Chinese literature, has been enabled to arrive. His means of reference to European treatises have been, necessarily, restricted, and many imperfections which might under other circumstances have been avoided or corrected have been the result, undoubtedly, of the limitation thus placed upon research; but it will be borne in mind that the task undertaken was of no larger scope than the examination of purely Chinese authorities, and this, at least, has been performed with the utmost care.

APPENDIX.

List of Works referred to in the foregoing paper, shewing the title and author's name in Chinese and English. (*N.B.*—Works not in the writer's possession and quoted only at second-hand, are distinguished by an asterisk. References to the "Notes on Chinese Literature" by Mr. A. Wylie, where the works referred to are likewise mentioned in that valuable production, are also appended).

A. *Wu-li-siao-she* 物理小識 by Fang Í-che 方以智, (date, about 1630).

B. *Kai-yü-ts'ung-k'ao* 陔餘叢考 by Chao Yi 趙翼 (date 1790).

C. *King-ts'u-sui-she-ki* 荊楚歲時記, Wylie, p. 45.

D.* *Shên-i-chwan* 神異傳, Wylie, p. 153.

E.* *Kai-wên-luh* 該聞錄 or *T'an-wên-luh* 談聞錄 by Li T'ien 李畋.

F. *Shan-hai-king* 山海經, Wylie, p. 35.

G. *Fung-su-t'ung-i* 風俗通義 by Ying Shao 應劭, Wylie, p. 131.

H. *No-kao-ki* 諾皐記 by Twan Ch'êng-she 段成式.

I.* *Wu-yüan* 物原.

J. *Kwang-po-wu-che* 廣博物志 by Tung Hia-chow 董遐周, Wylie, p. 150, (date, 1607).

K. *Kih-che-king-yüan* 格知鏡原 by Ch'ên Yüan-lung 陳元龍, Wylie, p. 151, (date, 1735).

L.* *Yüan-shu-ki* 宛署記.

M. *Wu-pei-che* 武備志 by Mao Yüan-i 茅元儀, (date 1621).

N. *T'ung-kien-kang-mu* 通鑑綱目, Wylie, p. 20.

O.* *Tsing-kang-chwan-sin-luh* 靖康傳信錄 by Li Kang 李綱, (date, 1129).

P. *Ts'i-siu-lui-kao* 七修類藁 by Lang Ying 郎瑛, (date, about 1575).

ARTICLE VI.

THE CHINESE GAME OF CHESS AS COMPARED WITH THAT PRACTISED BY WESTERN NATIONS.*

By K. HIMLY, Esq.
Of the North-German Consular Service.

AMONG the inventions which already in a remote antiquity spread from a corner of Asia over a great part of the globe the game of chess commands not the least part of our interest. If I say: "from a corner of Asia," I do so designedly; for it is not likely, that the many points of connexion, which I shall enumerate in the following pages as connecting the Indo-European chess game with the Chinese one, can be merely owing to accident. But whether China, or India was the birth-place of the game, I am not yet able to decide; I shall be satisfied, if I succeed in drawing towards a problem so interesting the attention of the scientific world, which has not been paid it sufficiently as yet.

In Legge's edition of the Chinese Classics (vol. I Lun-yü p. 193, note to chapter 22) referring to 博奕 po yi,† the editor says: "奕 is "to play at chess," of which there are two kinds, the 圍棊, played with 361 pieces and referred to the emperor Yaou as its inventor, and the 象棊, or ivory chess, played with 32 pieces, and having a great analogy to the European game. Its invention is attributed to the first emperor of the Chow dynasty, though some date its origin a few hundred years later."

The same phrase 博奕 occurs in Mencius, where Mr. Legge remarks (Chin. Class. vol. II, p. 213 chapt. XXX, 2) in a note, that it "may be taken together, simply='chess-playing,' or separately, as in the translation."

* Read before the Society on 16th March, 1870.

† Pauthier in his, "Livres sacrés de l'Orient" only translates the first of these characters: n'y a-t-il pas le métier de bateleur." Bateleur means a juggler.

It does not seem superfluous to make some remarks

1. Upon 博奕 *po yi.*
2. Upon the translation of 象棊 hsiang ch'i by ivory chess.*
3. Upon the invention of the 象棊 being attributed to the first emperor of the Chow dynasty.

1. The etymology of the two words *po* and *yi* is as obscure as our notions about the customs and pastimes of so remote an antiquity must necessarily be; so we can only state what are their accepted meanings now. As for *po* it is still in use in the phrase *tu po* 賭博 "to gamble," *yi* 奕 is become obsolete and has been entirely replaced by 棊 *ch'i.* But *ch'i* means the men, whereas *yi* probably meant the action. The phrase denoting "to play at chess," which is actually in use, is either 下棊 *hsia ch'i* "to put down the men," or 着棊 *cho ch'i* which seems to have the same original meaning, the first word being the *cho* of 着落 *cho lo;* and though 博棊 *po ch'i* occurs once in Kang Hsi's dictionary as quoted from the Shuo wön, such an expression would never be used in the colloquial of the present day.

In the Manchu version of the above passage of the Lun yü it reads *jurjun tonio efirengge* and in the passage of Mencius *jurjun tonio efime,* where *jurjun* means "a game at dice" according to Gabelentz's vocabulary,† *tonio* "chess" or "draughts," both expressions being substantives in the accusative (without termination), depending from *efirengge* "playing," and *efime* "to play." There is a second passage in Mencius, book VI, 1, 9, where the word 奕 occurs and where it is equally translated by *tonio* in the Manchu version; but here the translator seems to have imitated rather too slavishly either the original, or the Peking dialect, when rendering 奕之爲數小數也 *yi chĭ wei shu hsiao shu ye* chess-playing as an art "is but a small art" by *tonio i muten*‡ *buya muten hai* and 奕秋 *yi Ch'iu,* "the chess (player) Ch'iu" by *tonio sindara*

* This translation of *hsiang ch'i* occurs already in the Asiatic Journal of 1827.

† *Jurjun* Würfelspiel, Bretspiel; *tonio* Schachbret, Damenbret, Damenspiel; *tonio sindambi* Schachzspielen; *tonikô* Schachbret; *efimbi* spielen; *muten* Kraft, Fähigkeit, Kunst; *buya* klein; *hai* (a particle); *sindambi* setzen. Gabelentz, Sse-schu, Schu-king, Schi-king, in Mandschuischer Uebersetzung, 2nd vol. Wörterbuch. Leipzig 1864.

‡ See note.† The chinese word 數 is not explained in the above meaning in Morrison's dictionary. What sort of games the Manchu understood by *tonio* and *jurjun,* is and will perhaps for ever be unknown. It is even doubtful, whether that Tungusian dialect, which we call Manchu, is still a living language. If we consider, how many nations and languages (for

Chio, tonio being a word denoting the action of playing in *tonio i muten* and chess man in *tonio sindara*, which is equal to the Pekinese 下棊的 *hia ch'i tĭ*, as *sindambi* means "I put."

That 弈 should be used without a verb, is nothing uncommon in Chinese, as it is no 死字 *ssŭ tzŭ* or "dead word" like *ch'i* 棊, which could *not* be used for the action.*

2. The translation of *hsiang ch'i* by "ivory chess" is only one of three which would be possible, though not equally acceptable. It is true, that *hsiang* "elephant" may be used in compositions with other substantives for *hsiang ya* 象牙 "elephant's tooth" or "ivory," just as 牙 *ya* "tooth" is, and that the chessmen of the hsiang ch'i are often made of that material *(though perhaps much oftener of wood)*;—it is, farther, a fact, that the chessmen of the *wei ch'i* 圍棊 are generally *not* made of ivory, but of stone or a glassy substance, so that this circumstance *might* serve to distinguish both games.

But,—leaving aside a second possible translation: "figure-chess," which would relate to an obsolete sort of game ascribed to the emperor Wuti, representing the figures of the sun, the moon and the stars—I feel inclined to abide by the quite natural explanation of *hsiang ch'i* as "elephant chess," because the chessman called the "elephant" is much more characteristic for the game, than ivory is as a substance, of which hardly the majority of chessmen are made.

3. As to the inventor of the game, it is not unlikely, that the above mentioned Chow Wu Ti 周武帝 antagonist of the emperor 文帝 Wön Ti of the 陳 Ch'ön dynasty, who lived about A. D. 560 has been confounded with the celebrated 周武王 Chow Wu Wang, as the dynasty of the 北周 *Pei Chow* or "Northern Chow" to which Wu Ti belonged, is not nearly so generally known as the first Chow† dynasty. But the 象經 *hsiang ching* and the 象棋 *hsiang ch'i*, which the Tan Ch'ien Tsung Lu 丹鉛總錄

both stand and fall together) disappear in our age of scientific researches, almost unnoticed, we may imagine, how many more died away forgotten in the ages of darkness!

* *Ch'i* may be used as denoting a chessman, commonly called *ch'i tzŭ* 棊子, and may be written with 木 or 石, according as the men may be made of *wood*, as those of the hsiang ch'i, or of *stone* or *glass*, as those of the *wei ch'i*.

† Beware of confounding the Pei Chow with the 後周 hou Chow, which dynasty reigned 400 years later and belonged to the 五代 *wu tai* or 5 dynasties. The Pei Chow Duke Chio revolted against the *Wei* during the 南北朝 *Nan Pei Ch'ao* or Northern and Southern dynasties, and called himself Chow Kung.

says this Chow Wu Ti invented referred to the images of the sun, the moon and the stars. The book *hsiang ching* must be long lost, as the Tan Ch'ien Tsung Lu quotes its statement from a novel, The Tai Ping Yü Lan, written in the tenth century relates the same story and adds that Wu Ti's game must have been different from that of its own time.*

The oldest time to which we can trace the existence of a hsiang ch'i in China is mentioned in the following passage of the Shï wu chi Yüan 事物紀原 as quoted in the Ko Chï ching yüan† 格致鏡原

"Yung Mön Chow told Möng Ch'ang Chün: 'My lord if you be at leisure, play at elephant chess.' Query,—was there already such a thing at the time of the contending realms?"

As Möng Ch'ang Chün was a famous man at the time of the last Chow emperor *Nan* and was made a minister in the kingdom of Ch'i 齊, it is obvious, why the author of the Shï wu chi yüan draws the conclusion, that, if the above utterance of Yung Mön Chow's was a matter of fact, the elephant chess ought to have existed already at the time of the 戰國 *Chan Kuo* or "contending realms." Unfortunately we do not know, from whence the passage was originally quoted; and as it could have been possibly quoted from a novel, it can hardly be taken for a historical proof. So, until we can trace it back to a more reliable source, we must be content with fixing the period of the invention before the year 100 A.D. on the more conclusive authority of the Shuo Wön, which was published during this year.

* 丹鉛總錄世傳象棋爲周武帝製按後周書天和四年帝製象經成殿上集百寮講說隨經籍志象經一卷周太平御覽象戲武帝撰有王褒注王裕注何妥注又周武帝有象經發題義又所造而行棊有攄小說周武帝象經有日月星辰之象意者以兵機孤虛衝破寓於局間與今所日月星辰之目則鬬象決非今之象戲車馬之類也若如今之象戲芸夫收監俄頃可解豈煩文人之注百寮之講哉

† 事物紀原雍門周謂孟嘗君云足下燕國時已有此棋疑戰

The Shuo Wön, to wit, mentions the character 棋 ch'i written with 木 *mu* "wood" according to Kanghsi's dictionary; and it is not likely, that the 360 men of the wei ch'i should be meant, as such a number could hardly have been made of wood without an unusually large and unwieldy board belonging to it.

The first historical proof of an elephant chess almost identical with the game of the present day occurs in the following extract from *Niu Sŏng Ju's Hsüan Kuai Lu* 玄怪錄 ———, written at the end of the 8th century of our era, as quoted in the Ko Chĭ Ching Yüan:

"In the first year of *Pao Ying* Tsŏn Shun* from *Ju Nan* heard in the old mansion of the woman *Lü* during the night the sound of the war drum. A man in armour, covered with a helmet, reported the words of the general of the golden elephant, that they were fighting with the T'ien-No thieves. Shun took the candle and lighted around, and after midnight a mouse hole in the wall on the East side was changed into a city gate. There were two armies arranged in battle array against each other. The general came in and said: 'The sky-horse† flies aslant over 3. The chiefs go sideways, attacking all the four cardinal points. The luggage carts go straight forward and don't retire. The six men in armour go in unbroken files. Then the drum is beaten, and from both hosts a horse comes off aslant 3 feet. The drum is beaten again, and on both sides a footsoldier goes sideways 1 foot. The drum is beaten again. The chariots advance, and instantly the stones of the cannon fall down pell-mell.' So he made a hole in the East wall, when he found an elephant chess board in an old grave with chariots and horses arranged."

Next to this extract from the "Hsüan Kuai Lu" the Ko Chĭ Ching Yüan gives one from the 晁無咎序 Chao Wu Chiu Hsü,

牛僧儒玄怪錄實應元年汝南岑順於呂氏故宅夜聞鼙鼓聲介冑人報曰金象將軍傳語與天那賊會戰順明燭以觀之夜半後東壁鼠穴化爲城門有兩軍列陳相對部伍既定軍師進曰天馬斜飛度三止上將橫行擊四方輜車直入無迴翔六甲次第不乖行於是鼓之兩軍俱有一馬斜去三尺止又鼓之車進須臾砲石亂下云

* 焉冢有象戲局車馬具云因發掘東壁乃古

† 天馬 so called because of its swiftness, as though it flew through the air.

according to which the elephant chess is explained to mean a mimicry of war,* as Huang Ti used wild beasts in his warfare. Chao, the author, by whose name the work is called, saw people playing at it, when a boy. Afterwards he tried to make 19 out of the original 11 lines dividing the board both lengthwise and sideways and to augment the original number of 32 men to 98. This does not seem ever to have come into general use. The next extract in the Ko chĭ ching yüan is from the 胡應麟筆叢 Hu Ying Lin Pi Ts'ung, and reads, as follows:

"The story of Tsön Shun in the Hsüan Kuai Lu serves as an evidence for the sort of elephant chess in use among the contemporaries of the T'ang dynasty. That the horse goes aslant 3 lines, the soldier sideways one line, is just as nowadays. Only, if the chariot goes straight forward and does not retire, it is like the soldier now-a-days, and I surmise that the rest does not quite agree. As for what is said in the *Hsü* of *Chao* 晁序 about the elephant chess of the Sung dynasty having got 11 lines lengthwise and sideways, there being 10 lines lengthwise and 9 sideways now is also a strong difference with that period. Then the Shĭ Wu Chĭ Yüan of the time of the Sung also mentioning the story of Tsön Shun to prove that it was just like the chess in use under the Sung, shows that the T'ang and the Sung agreed with each other, and, perhaps that of our own time does not agree with these exactly."

As may be inferred from the above extracts, the game was already like the present one during the T'ang dynasty, excepting the boards being two squares' breadths broader and one square's breadth longer, then, and the chariots not being allowed to be moved back. But if we are right in drawing inferences from what is said in Tsön Shun's story, we have no right to do so with regard to what it forbears mentioning. We may even suppose that the numbers of the men was greater then than now, because the number of the lines and the squares was. So, for example, the Japanese chessgame, which is said to have been brought over

胡應麟筆叢唐人象戲之製玄怪錄岑順一事可據馬斜行三路卒橫行一路正與今同獨車直進不迴則類於今之卒恐其他不盡合也據晁序則宋時象棋縱橫皆十二路而今縱十路橫九路與宋時亦頗不合又宋人事物紀原亦載岑順事以爲與宋正同則唐宋固無異而國朝或未盡同也

* 胡應麟筆叢唐人象戲之製玄怪錄岑順一事可據馬斜行三路卒橫行一路正與今同獨車直進不迴則類於今之卒恐其他不盡合也據晁序則宋時象棋縱橫皆十二路而今縱十路橫九路與宋時亦頗不合又宋人事物紀原亦載岑順事以爲與宋正同則唐宋固無異而國朝或未盡同也

from China to Japan by Kobodaishi, who lived about 820 A. D., is played on a board containing one row more sideways, but with 8 chessmen more.

The question, whether it be more likely, that the more complicated games should have sprung from the simpler ones, or vice versâ, is not at all a matter for mere logical arguments. If there were no other way of settling it, one ought to remember the story of the fish in the bucket of water, before losing one's time at it,—and ask, whether one origin of the games ought necessarily to be more likely than the other. Only historical, ethnological and even geographical researches and the comparing of the chess games of many different nations can lead us nearer and nearer to the source from which the king of games has sprung.

That the Chinese chess game had a common origin with ours, is at once obvious to any body who knows both, but this conviction becomes the stronger, the more one inquires into their history. The most striking similarities are the board with its 64 squares (not reckoning the river in the midst of the Chinese board), the 16 men on each side, the two men at the corner with equal power, be they called chariots, or castles, and the next two men which are horses having the same power everywhere, always reckoning a square in our game for a corner of a square in the Chinese one, where the men are put on the corners.*

A most necessary link of connexion between the European game and the Chinese one is furnished by India. The relations between the Indian and the European games have not been lost sight of, since Sir W. Jones' treatise "on the Indian game of Chess" was published in the 2nd volume of the "Asiatic Researches" in 1799. The oldest set of chessmen in Europe seems to be that of the Imperial treasury at Nuremberg, with which Harun al Rashîd presented Charlemagne, and there is no evidence that I know of the game's having been introduced into Europe before that time. While the board remained the same, the names of the men (and very likely their powers, too) underwent many changes there.

As the Persian name of the game of Chess: *chatrang* or *shatranj* can only be well explained by means of the Sanscrit *chatur angam* i. e. "the game of the '*four parts*' of the army," the original meaning

* See the paper of Mr. Hollingworth on the Chinese chess game. Journal of N. C. B. of R. A. S. for 1866 and mine in the Zeitschrift der Deutschen Morgenländischen Gesellschaft, 24th vol.

was certainly a mimicry of warfare, the four parts of an army being: *chariots, horse, elephants* and *footsoldiers*, in Sanscrit *ratha, açva, hastin, padâti.*

The foreign names of the men were not understood in Europe, the more so perhaps, because elephants had not been used there for warfare since the Carthaginian wars, chariots since the beginning of the middle ages. As the parts of medieval armies were represented by the ruling or subject classes, the distinction of classes was mixed up with the representation of warfare; so the horse became a *knight*, whose neighbour, as a matter of course, ought to be a *bishop*,* the *pawns*† meaning nothing else, but the original Persian word *piyâde*, that is to say, footsoldiers. The German, Dutch and Scandinavian languages introduced the distinction of classes even here in calling the pawn: *bauer, boer, bonde*, which means "peasant."‡ The ancient oriental name of the bishop remained in the Spanish ALFIL, which word (with the article al) is just the Arabic expression for "the elephant;" the Portuguese, however, changed this into a *delfim* or dolphin, the French into *fol* or *fou*, a "fool" or "jester;" the Italians confounded it with another arabic word meaning an "ensign," either *alfâris* or *alfâras*, which is well distinguished in the Spanish *alférez;* into this confusion they were led perhaps by the Arabic name of the knight *alfâras* "the horse;" in consequence *alfiere* means in Italian "ensign" and "bishop in the chessgame." Also in Russian the ancient name of the bishop was *slon* "elephant." The "vizier" *ferzîn* or *firz* in Persian, was changed according to the spirit of our middle ages into a queen, only the Russians retained the expression *fierzy* until they exchanged it for the prevailing queen in later times.

But the most enigmatical of all the chessmen is the castle. Its ancient Persian name *rukh* once spread over all western Europe, but was as generally exchanged afterwards for expressions denoting

* Polish *kaplan*=chaplain. Another sort of denomination is that from the powers of the men, as German *Läufer*, Danish *Löber*, Swedish *löpare*, Hungarian *futó*, all meaning "the runner"=bishop; German *Springer* (*Rössel* =horselet), Danish *Springer* meaning "the jumper"=knight, the French *cavalier*, Hungarian *lovas* mean "a horse-man," *cavaliere* in Italian "horseman," or "knight."

† Pawn=French *pion*, Spanish *peon*, Portuguese *peão*, Italian *pedina* are all derivatives of the latin pes, pedis "foot."

‡ The Dutch called the bishop "*raadsman*" alderman, councillor.

"a castle," or "a tower." This one cannot find to be the original meaning of the word *rukh* in Persian; and yet it might perhaps have been meant for some contrivance intended to be a protection to the wings of the army leaning on some hill or fortification; this is perhaps the meaning of the *kaku* or "horn" in the Japanese game; the original Chinese word 角 kiŏ also being used for the wings of an army.* Properly speaking a fortification ought to be immoveable; but one needs only to remember the battering engines and wagenburgen (waggon-bulwarks) in order to understand the change.

I fully agree with Mr. Bland, who in his careful paper "On the Persian Game of Chess," printed in the Journal of the Royal Asiatic Society of 1852 refuted† Sir W. Jones' derivation of *rukh* from *roth*, the Bengal form for the Sanscrit *ratha* "chariot;"‡ but I cannot agree with his assuming the possibility of its meaning a "hippopotamus" (p. 66) which would be a deviation from the rule of the game meaning originally a mimicry of warfare, which the game otherwise does not warrant. I rather think there *is* "some reason to doubt that the *rukh* was intended to represent an animal." It may not be out of place to quote here the different meanings of the word *rukh* explained in one of the best Persian dictionaries, that of Vullers. They are 1. facies, vultus; 2. gena; 3. *latus, pars;* 4. habena; 5. corona, diadema; 6. nomen avis fabulosæ; 7. nomen latrunculi in Schahiludio ab ave dicta desumtum; 8. planta quædam aquatica.—Vullers neither mentions the meaning of a large fabulous quadruped quoted by Bland from two Persian authors, nor that of a "hero," which d'Herbelot gives it on the authority of a place in the Shahnameh, where W. Jones would have it rendered by "cheek." I confess, I have vainly endeavoured to find the original meaning of the Persian word and for the time being, incline either to give it the 3rd meaning mentioned in Vullers' dictionary, viz: that of "side" (of an army), or to revert to d'Herbelot's above-mentioned explanation of the same word as it occurs in the Shahnameh. On the other hand d'Herbelot seems

* The Chinese use of the figure is slightly different from that of other languages, at least so far as more than *two* horns may be contained in *one* army or battle array. Besides one may compare the Greek *kĕras* latin *cornu*, the figure of a 'wing' being most generally used now in European language, as it was already in Hebrew and partly in latin."

† p. 63.

‡ Asiatic Researches, II, p. 161.

to be mistaken, when grounding the exchange of the ancient "rook" for a "castle" on the fact only of the Italians using the same word for both. The languages of Southern Europe distinguish both, as will be seen below.

English: 1. *rock* (synonyme cliff), 2. *rook* (syn. castle of chess), 3. *rook* (bird).

Italian: 1. *rocca* (syn. rupe, scoglio, castello), 2. *rocco, rocchetto.*

Spanish: 1. *roca* (peña), 2. *roque* (torre, castillo), 3. *ruc.*

Portuguese: 1. *roca* (rocha, penha), 2. *roque* (torre), 3. *roco.*

Whether the similarity of the two expressions had some influence after all on the exchange of the *rook* for a *castle*, it is not easy to establish now; only it is very likely, that towers, or castles were early introduced into Europe by the Arabs, either on the backs of the elephants, who are often replaced on their original square near the king by camels for example,—or as separate pieces, in which case the elephants might have been left on the original square. Thus we find in the game of the Parsees at Bombay, the piece having the power of castle called *hatti* "elephant," or *qal'e*, which is the arabic name of "a castle." The Malays call it *tir*, that is to say "castle;" but these have got another instructive expression for it, namely "*prau*," which means a "ship." As the ancient Russians called the castle *ladyá*, which has the same meaning as *prau*, the extreme North and South thus combine to redeem Sir W. Jones's brahman from an undeserved suspicion, Sir W. Jones having found fault with a ship's *(nauka)* having replaced the ancient chariot *(ratha)* in one of the Indian games.*

The piece which we call "queen," is called sometimes by the name of *wazîr* sometimes by that of *ferzîn* in the games of Western Asia, both being much of the same meaning; but in the game of the Shahnameh both names occur, one piece on the right and the other on the left of the king and so it is in the game of Timur. The *wazîr* moves straight one square, the *ferzîn* obliquely one square, just as the *shĭ* in the Chinese game do. This may lead us back to the Chinese game.

In the Chinese game the reference to warfare is even more obvious than in the Indian one; for it contains not only the four parts of

* As. Researches p. 161. The brahman, Radhakanta, told Sir W. Jones, that the game was invented by the wife of the king of Lanka, which is Ceylon, during the siege laid to his capital by Rama. As Ceylon is an island, boats used for warfare would be the less out of place.

the Indian army: footsoldiers, chariots, horses and elephants, but cannons besides these, which are quite peculiar to China, excepting Russia, where the castles were formerly sometimes called *pushki* i. e. "cannons." The *p'ao* or "cannon" in the Chinese game of Chess need not imply a modern origin, as battering engines, or other implements for hurling stones were already used under the Chow dynasty.* The king is represented here by a general (chiang-shuai), and his two secretaries (shĭ) are the *wazîr* and the *ferzîn* of Timur's game, but only with the powers of the latter.

As for the elephants, it ought to be stated, they were really used anciently in Chinese warfare. Perhaps that they would be mentioned in European books as inhabiting parts of Kuangsi and Yünnan, if these provinces were not all but inaccessible to European travellers. As it is, the Ko Chĭ Wu Yüan mentions their existence there; and the Tso Ch'uan relates, that the *Wu* attacked the *Ch'u* with elephants, whom they stirred up by putting combustibles under their tails and kindling them.

The elephants are not to be met with in the Japanese game of Chess, though containing 20 men on each side, which are put in the midst of the squares, as in all the occidental games. The river in the midst of the board is also not found in Japan; so it seems to be an innovation quite peculiar to China referring to the Huangho, as the river on the board is often called, as the boundary between the northern and southern states of China. The board of the Tang and Sung dynasties mentioned above with its 11 lines by 11, or 100 squares (as many as that of the Shahnameh has got), cannot also be thought to have shown a river in the midst, as the board could not be an equalsided square in such a case.

The Japanese game, introduced from China, as above stated, seems to prove, that there were different sorts of the game at a time in the latter country, as there were in India and other countries. The jade stone general† has got two golden *(kin sho)*

* See Kanghi's dictionary under the character 礙

† As I learned from a Japanese, there are some mistakes in the denominations of the Japanese chessmen, as published in the Chinese Repository, vol. IX, p. 631. Instead of 王 it ought to be 玉將, instead of 金 and 銀 one ought to read 金將 and 銀將, of whom the former *yok sho* would mean the commander in chief, the other *sho's* only being officers, just as the word *chiang* ought to be understood in the passage of the Hsün Kuai Lu mentioned above, where I translated it by chiefs. Instead of *kaku*

and two silver officers *(gin sho)* at his sides, replacing the secretaries (or viziers) and elephants. The jade stone might refer to the command directly derived from the emperor, as this precious stone is the material of the imperial seal in China, high officers using a golden, lesser ones a silver seal. The two *p'ao* of the Chinese game are replaced here by the *kaku sho* on one side, and the *hi shiya* on the other. The former has been mentioned above; as for the latter, it may be written 飛車 and mean "a flying cart;" the character 輩 mentioned on the board printed in vol. IX of the "Chinese Repository" means the "pei" or 100 war chariots; it is not evident, whether originally a pi li ch'ö 霹靂車 has not been meant. The chariots in the Japanese game not being allowed to retire is another feature in common with the ancient Chinese game alluded to in the relation of the Hsüan Kuai Lu mentioned above. What makes the Japanese game more like the occidental ones than the Chinese one is the increased power of the pawns, after they have reached the opposite row.

No chessman in any of the games mentioned above is more stationary than the knight, or horse; this is put on the second square (or line in the Chinese game) in each of them and has the same powers everywhere with few restrictions, one being that of a line always representing a square in the Chinese game, another one that of its not being allowed to retire in the Japanese game. Besides the knight alone would suffice to make the common origin of all games of chess very probable, if not incontestable.

The number of the men not being constant, though mostly, and one might say originally, restricted to 16, this and the circumstance

read 角將 kaku sho. Pawns are called 步兵 *ho hei*, the knight 桂馬 *ke ma* (!), the chariot 香車 ko shia. This expression is somewhat enigmatical. *Hsiang ch'ö* "a perfumed cart" might be used in Chinese poetry for a lady's cart, but this is not the correct interpretation. Perhaps 香 only represents the sound; *ko* might mean "small" perhaps in comparison with the *hi shiya*; otherwise it might have been confounded with 鎗 *ch'iang*, whose Japanese equivalent is *yari*, just the expression used for this Chessman in the Chinese Repository, as this was one of the chief weapons used by the soldiers standing on the war chariots. The present pronunciation of *ts'iang* "spear" in Japan is, however, *so*, and there is no interchange in Chinese between *hiang* and *tsiang*, as there is between the syllables *siang* and *tsiang*. Nevertheless *ko* seems to be the usual abridgment for the Chinese *hiang*, which may have sounded somewhat like *'hong*, in the dialect of middle China, where kiang is still sounded *kong*.

of their being put on the corners in China ought to have partly affected their positions. They are 16 on either side in the Chinese, Indian and European games, 20 in that of the Shahnameh and the Japanese game, 28 in that of Timur. They are arranged in 2 rows in our game, in the Indian one and in that of the Shahnameh. In the Chinese and Japanese games the pawns make up the first row, the 2 cannons (Chinese) and the *kaku sho* or "commander of the horn," and the *hi shia* or "flying chariot" (Japanese) the second, the other men the last row; the game of Timur has got 4 rows.

To facilitate a review of the chessmen mentioned in the above lines at a glance, I shall insert here a table showing their denominations in different countries. Powers differing from those of the European game will be indicated, *s.* meaning straight, *o.* oblique moves, the ciphers referring to the number of squares over which they can move.

English, ...	pawn	king	queen	bishop	knight	castle	additional pieces
Persian, ... (Shahnameh)	piyâdeh[1]	shâh	ferzîn[2] *o.* 1.	pîl *o.* 2.	asp[4]	rukh	shutur (camel)
Timur, ...	piyâde	shâh	ferzîn, *o.* 1. wazîr *s.* 1.	pîl *o.* 2.	asp	rukh	jamal (camel), dabbâbah, zarâfa, talîa
Indian, ...	padâti	nrpa, râga	——— [2]	hastin[3]	açva	nauka, ratha *o.* 2.	
Chinese, ...	ping	chiangshuai	shĭ *o.* 1.	hsiang *o.* 2.	ma	chü	p'ao
Japanese, ...	ho hei	yok sho	kin sho 1.	yin sho 1.	ke ma	ko shia	kaku sho, hi shiya
Malay, ...	bidak[1]	sah		gajah[3]	kuda[4]	prau, tir	
Russian, ...	pieshka	kórol, tzar	fiérz	slon	loshad	ladya, pushka	
Polish, ...	pieshek, piechota	(król)	(królowa)	kaplan	jezdny	roch	
Spanish, ...	peon	rey	reina	alfil	caballo	roque, torre, castillo	
Portuguese, ...	peão	rei	rainha	delfim	cavallo	roque, torre	
Italian, ...	pedina	rè	regina	alfiere	cavaliere	rocco, rocchetto	
French, ...	pion	roi	reine	fou	chevalier	tour	
German, ...	bauer	könig	königinn	läufer	springer	thurm	
Dutch, ...	boer	koning	koninginn	raadsman	paard	kasteel	
Swedish, ...	bonde	(konung)	(drottning)	löpare	häst	torn	
Danish, ...	bonde	(konge)	(dronning)	löber	springer	taarn	
Hungarian, ...	közlegény	(király)	(királynö)	futó	lovas	torony	
Bombay, ...	päda	pâssâ	wazîr	ôt (camel)[3]	ghôra[4]	hatthî, qal'e	

1. The *h* at the end of Persian words was perhaps anciently pronounced and is usually rendered by a *q* (or strong *k* like the Chinese one) in Arabic; so the word in question became *baidaq*, whence the Malay *bidaq*. 2. The ancient representant of the queen in India I could not make out; though according to (Persian) tradition the vizier of an Indian king was the inventor of the game and one ought to expect that the piece called after him was known in India. 3. The elephant of the Chaturrâji described in Sir W. Jones's treatise has had its moves changed for those of the *nauka* boat, see below the Bombay chessmen, where *hatthî=hastin* is one of the names of the castle; the camels (ôt, shutur, jamal) move like our bishop, *gajah* is another Sanscrit word for elephant. 4. The Turks and Arabs who use the Persian names of the men, besides, call the horse, the former "*at*," the latter *fâras*, the Malay *kuda* and Bombay *ghôra* being derivatives of the Sanscrit *ghotaka* "horse"=açva.

For investigating the first beginnings of the game of Chess, the board is not without importance. It is a not uncommon mistake to ascribe the invention of this game to the Grecian contemporary of the Trojan war, Palamedes, and yet checker boards in general and games played on them are of an antiquity and general dissemination which baffle all attempts to get at their original source; while an interesting light might be thrown by the investigation on the course civilisation took in those remote times. Though I incline to assume for the real chessboard the original number of squares, which the European game shows, namely 64, as spread from Europe over India to China, there are remarkable deviations from the rule, 112 squares in the board of Timur, 100 squares in the Shahnameh and under the Tang and Sung, 81 in Japan. Perhaps Chess is only an improvement on more ancient games. Of these the Egyptian game of draughts* is one of the

* Birch, Rhampsinitus, and the game of draughts. Transactions of the R. Soc. of Lit. New Series IX. The passage of Herodotus quoted there speaks of casting dice, that of Plutarch of the petteia. Mr. Birch would prefer Plutarch's version and relying on this would give the *kyboi* of the Grecians an analogous meaning in this case, but ancient games on checkerboards were often accompanied by casting dice, *e. g.* the chaturraji, as mentioned in Sir W. Jones's treatise referred to above which is a sort of chess for four persons. It would not be quite impossible, nevertheless, that the expression *kubos* "a cube" might have been used for a square board just as *sheshder* in Persian denotes the dice and the chessboard, the former being the original meaning, as *shesh* means 6 and seems to refer to the six sides of a cube.

most interesting, as it is mixed up with an old tradition attributing its invention to Thoth, who won from the moon the 5 intercalary days. This is more or less corroborated by Herodotus and Plutarch, and ancient representations of games of draughts are not unfrequent on Egyptian monuments. It would seem almost, that pretty generally traditions of an astronomical origin of checkerboards obtained, for this alone would explain the frequent denomination of the squares as houses, namely *casa* in Spanish and Portuguese, *case* in French, *khaneh* in Persian. It might be, too, that the above mentioned Chow Wu Ti was led by such traditions to compose his *hsiang ching* referred to above. The black and white colours of the squares of the Western chess-board have been alluded to in poetry as denoting day and night; and this might have been their real meaning. The ancient Egyptian draughtsboard showed the same distinction of colours, which Mr. Birch in his treatise "Rhampsinitus" explains in the same way. The wei ch'i of the Chinese is played on a board of 324 squares or 361 intersections, whose number is said to refer to the days of the year.

In the above lines I hope I have proved at least the probability of a common origin of all games of Chess and the unlikeliness of the Chinese games being without any connexion with the rest despite a superficial dissimilarity of the board, the river and the palace (kung) and the additional pieces (the 2 p'ao). One will have seen, that the Japanese game was introduced from China, that there have been slightly differing sorts of the game at a time or successively in the latter country, that the present game came into general use after the Sung dynasty, that a game not much differing from the actual one was played during the Tang dynasty, that the present character for the game was used in the Shuo Wön during the first Han dynasty with the radical for wood making it likely that it referred to the "elephant chess," and that there was a tradition of the "elephant chess" being used at the end of the first Chow dynasty.

After having once assumed a close relation between the Indian and the Chinese games of Chess, Mr. Bland's theory* of Timur's game having originally existed in Persia before the other variations, nay, of the games having been imported abridged from Persia

* It is grounded on a Persian manuscript in possession of the R. A. S. of London.

into India seems to become even more unlikely than it would have seemed perhaps to most people at the very outset. It may be true, that India, in the thorough absence of historical records, together with the doubtful age of its purânas, can only oppose traditions to this theory; but then the Persian traditions come to their aid, and the antiquity of the game on Chinese soil together with many reasons long known before Mr. Bland's essay (as e. g. the Indian name of the game) seem to prove beyond all doubts that the course of the game's propagation went on westward at least into Persia. Whether it was imported from China into India, or from India into China, or from Cambodia into both countries, is still a matter of doubt. It is not quite improbable, that the king of *Canûj*, to whose minister Persian tradition ascribes the invention, was not after all a king of *Kanyakubja*, but one of Cambodia, in whose country modern researches have discovered the remnants of a marvellous civilisation sunk in the oblivion of many ages. At any rate the birth-place of the game ought to have been a country, where the use of elephants for warfare was well known; and though this was the case in China in ancient times; yet India or Cambodia would seem more likely, on that score, to be entitled to the claim.

ARTICLE VII.

NOTE ON THE CHIHKIANG MIAUTSZ'.

By D. J. MACGOWAN, M.D.

OF the regions which Ethnology longs to explore the most important undoubtedly are the mountains of China amidst the fastnesses of which aboriginal tribes have found shelter from the ever advancing tide of the people of the Plain; and it is incumbent on every traveller who observes a new fact, every reader of Chinese who meets with glimpses noticed of those people, to communicate the as a contribution towards the elucidation of their history. This brief paper is designed to make known two discoveries which are of no inconsiderable interest with regard to this subject; to wit—

Miautsz' are to be found in a part of the country where their existence was not suspected; and that at a period comparatively modern they proved an annoyance to the government, and inhabitants of the central portion of the Chihkiang province.

At the dawn of the historic period in China we find two distinct peoples, highlanders and lowlanders engaged in a warfare which has intermittingly continued to the present day. The area occupied by the former has gradually contracted in consequence of the increasing number of the people of the plains and vallies, who having also the appliances of a higher civilization have forced the hilltribes or Miautsz' into remote gorges and almost inaccessible mountains. Some tribes have been exterminated, others have been absorbed into the general population, while many either still maintain an independent existence, or have become reconciled to their Chinese neighbours, having to a greater or less extent accepted the civilization of the dominant race: accordingly, the Chinese divide them into two classes, the wild, and the civilized—as *sang* and *shuh*—literally raw and ripe Miautsz'. Miau signifies

a plant springing from the earth, or budding forth: the affix tsz' means son or child. Thus the Chinese designation is equivalent to Sons of the Soil or aborigines.

Hitherto the Miauites, as Dr. Legge appropriately designates them, were supposed to be restricted to the western provinces—Hukwang, Szchuen, Yunnan, Kweichau, and Kwangsi, but as we now find them in the maritime province of Chihkiang it is not unlikely that they are to be met with in spots through all the intervening mountain chains. Anciently their possessions doubtless extended to the coasts of Kwangtung, Fuhkien, and Chihkiang.

In 1859 I crossed with a fellow traveller, the mountains which divide the departments of Kinhwa and Chichau in one of the glens of which we met a party of women whose extraordinary habiliments attracted our attention. They were evidently out on a holiday ramble which their full sized unbound feet, (so unlike those of their Chinese sisters,) enabled them to enjoy. They wore their hair folded towards the forehead in the form of an arch, from which was suspended by a silver chain a silver plate, isosceles shape, rounded at the angles, and inscribed with felicitous characters, as "longevity," "happiness," and the like. These were amulets. As I merely regarded them as a hill clan, and as they were extremely timid, I made no attempt to interrogate them. On descending the valley however, I made inquiries concerning them and was informed they were Miautsz'; that they lived secluded in the recesses of the adjacent mountains, conforming to a considerable extent to the customs of the neighbouring country; the men presenting no peculiarity in dress. Their daughters are never given in marriage beyond their pale, but girls are sometimes taken from without for wives. It was stated also, that they dissent from the prevailing religions, Confucianism and Budhism, being worshippers of spirits or demons and having neither temples nor images. They cultivate small patches of ground, sell wood and charcoal to the people of the vallies, from whom they make but few purchases, manufacturing their own garments. They are allowed to attend the competitive literary examinations, but rarely avail themselves of the privilege, although many of the men are able to read and write. They present many dialectical peculiarities which my informant was unable to explain. What was told me concerning their manners and customs—their marriage and funeral ceremonies did not seem trustworthy, and no note was made of them.

Subsequently, on learning that well informed natives at Ningpo were ignorant of the existence of Miautsz' in their province, and that foreign students of Chinese entertained grave doubts on the subject, I searched the local histories of that portion of the province, in the expectation of finding in those works corroborative evidence of the discovery, if discovery it was. The result was confirmatory of the fact that had been communicated to me while making my mountain exploration. Frequent reference is made to the Miautsz' in the topographical accounts of the departments and districts of the southern portions of Chihkiang province. This testimony will be received as conclusive. It was during that period of anarchy which prevailed, on the subversion of the Yuen or Mongolian dynasty, terminating in 1368 by the establishment of the Ming dynasty that the Chihkiang Miautsz' appear on the stage of local history.

In the 金華府誌 Kinhwa a topographical and historical work, (such as every district, department and province possesses) reference is made to the failure of Wu Teh-hai to subjugate the department of Chichau, a task that was entrusted to him by Hung-wú, who subsequently founded the Ming dynasty, Hung-wú himself took the field. Two Mongolian generals, who were brothers, were in command of the departments of Chichau and Kinhwa—Shih-meiní-sung, and Hau-sung, the former sent a force from Chichau to aid the latter at Kinhwa; the soldiers were accompanied with chariots. When Hung-wú heard this he felt assured of victory, on the ground that the Yuen army would find itself so encumbered in the mountain passage by these vehicles, they would be unable to show much resistance. He directed Wu Teh-hai to intercept them at the Meihwa mountain, who there defeated and scattered the Mongols. Subsequently that general received the submission of three Miautsz' generals—Tsing-ying, Liu-ching and Li-fuh. Being pleased with their bravery he allowed them to retain their commands. Not long after, however, they mutinied in a treacherous manner. Early one morning they entered Wu Teh-hai's office to be present at the archery exercises at the Octagonal Pavilion. The clans knelt before Wu Teh-hai's horse, acting as if they were about to let fly at Tsing-ying. Wu Teh-hai was about to speak to Tsing-ying when the latter suddenly drawing a hammer from his sleeve, struck Wu Teh-hai with such force on his head, that he fell from his horse, his brain protruding. The Miautsz' then killed Wu Teh-hai's son and the prefect Wang-kai;

after which they pillaged the city and undertook an expedition to Suchau. They were, however, subdued by Li Wang-tsung.

In the 浙江通誌 Chihkiang Tung-chi the topographical and historical account of the Chihkiang province, there is the usual chapter devoted to notices of distinguished men. Among these worthies was Kung Tsai-ching who was slain by the Miautsz' in Kinhwa in the first year of the reign of Taitsoo, (Hung-wu) founder of the Ming dynasty A. D. 1368. Taitsoo had pacified that region and left Kung Tsai-ching in command. General Kung was drinking wine with some guests when he heard that the followers of the Miautsz' general Ho Jin-teh, several thousand in number had risen in rebellion. Forthwith he mounted his horse and accompanied by only forty men rushed to meet the rebels. The thieves felled him to the ground, he defying and upbraiding them until he was killed. A temple was erected to his memory, and annual sacrifices were ordered to be made to his name.

In the same annals Pang Puen-kau is named as having rendered service at Kinhwa when the Miautsz' rebelled.

Under the caption "Famous Statesmen," Wang Tan-tung the prefect of Kinhwa is honored for his fidelity to the newly established dynasty. In 1368 when the Miautsz' rebelled he refused to yield to them, and was killed in consequence.

Turning to the local histories we find the same facts recorded, and also additional information. It is stated in the 處州府誌 Chichau topography in the chapter entitled Public Affairs, that in 1333, that is to say, during the reign of the last emperor of the Yuen dynasty—or 13 years before its fall—the city of Chichau was held by Tsiang Li-yu and Ho Jin-teh two Miautsz' generals, who had killed the commander Hung Tsai-jin. The son of that officer Hung Tien-pih, was directed by the emperor to march against the Miautsz' army. At the district city of Tsing-yuen he was joined by a body of troops under Li Wang-tsung, who had been ordered to suppress the insurrection in Chichau. These officers with their combined forces had a battle at Liu hill with the thieves under Ho Jin-teh; these were routed, and seeking shelter in Chichau were captured, and the two generals Ho Jin-teh and Tsiang Li-yu were put to death.

Thus it appears that in the departments of Chichau and Funghwa the Miautsz' were numerous and formidable so late as the middle of the fourteenth century: that they flourished during the disturbances which preceded the subversion of the Mongolian sway,

and that they were subjugated early in the Ming dynasty, since which period they disappear from provincial history.

The historians of the hill tribes of China are all Chinese, and we cannot therefore look for impartiality in the few references which are made to them. Enough is known, however, to show that the raids which they have often made into the vallies and plains have been to avenge some wrong which they have suffered at the hands of their more civilized and powerful neighbours; and it is safe to assume that the Miautsz' had suffered during the reign of Shin-tsung, the last of the Yuen dynasty, under whom disorders everywhere prevailed. Certain it is, that as soon as stable government was restored, these people became peaceful.

Since the above was communicated to the Society a journey has been made by the Rev. M. J. Knowlton to prosecute inquiries respecting the hill tribes of the department of Kinhwa. He published an account of his researches in the Chinese Recorder vol. I. 1869. The people whom Mr. Knowlton met and described not being Miautsz', he doubts if there are any to be found in that province; and in answer to my account of the evidences which local history affords, he suggests that these Miautsz' were from other provinces. It is sufficient to remark in reply that the region which he visited is several days journey from the district in which the above named Miautsz' were met with, and as regarbs the idea that the Miautsz' of the 14th century were invaders, it may be accepted if it can be made to accord with the foregoing historical notices.

ARTICLE VIII.

NOTES ON THE PROVINCIAL EXAMINATION OF CHEKEANG OF 1870, WITH A VERSION OF ONE OF THE ESSAYS.*

By Rev. G. E. MOULE.
Of the Church Missionary Society.

THE Provincial Examination for the second Literary Degree (that of Kujin) took place at Hangchow, according to the law, in the first half of September. It is said that eleven thousand candidates entered the Examination Yard; of whom one hundred and twelve obtained the degree, and eighteen were 'honourably mentioned'—(secondary Kujin). The regular number is ninety-four. Eighteen extra degrees were given by Imperial Grace, on account of the liberal pecuniary subsidies lately raised in Chekeang.

The Lieutenant-Governor of the Province (Futai) is *ex officio* local President of the Examination. But on this occasion Yang Futai deputed his office to the Literary Chief (Hio-tai) Hsü.

His motive is said to have been fear of insult from the candidates. He has never taken his second degree; and consequently his assuming even the formal duties of examiner of his literary equals was not unlikely to provoke their criticism.

At the examination in 1867 Ma Futai (lately murdered as Tsung-tuh at Nankin) was roughly handled in the Examination Yard for a different reason. The Government subsidy, allowed to the poorer candidates for travelling expenses, had been embezzled in a certain District by the Mandarin. The candidates from that District with some others, seizing a favourable moment rushed upon Ma, and hustled him and tore his robes till in fear for his life he signed a bond for the money; upon which his assailants

* Read before the Society on 16th December, 1870.

returned to their cells and quiet was restored. The Enclosure is guarded by troops on the outside; but no soldiers are admitted within the sealed gates, and except an undisciplined and unwarlike crowd of sub-examiners, secretaries, proctors, copyists, &c., the incarcerated Mandarins have no protection whatever from the ten thousand excited and jealous "bachelors of arts" who are their fellow-prisoners.

Yang Futai's absence when the Imperial Examiners and the Local Board made their public entry into the Kung-yuen (Examination Yard) excited much attention and gave rise to some of the many rumours with which this year has been so rife. The Futai, some said, expects an insurrection to break out on the 15th of the month in the Huchow department, and he therefore remains in his *Ya-men* to be ready for the emergency. Or, he is going down to Ningpo to inspect the coast defences where insurrectionary pirates, or foreign troops have landed or are about to land. Or else instigated by Tsun Kuo-fan, he is about to massacre the ten or twelve foreign missionaries in the city, or at least the French and Roman Catholic portion of them. My old teacher, who had witnessed from his cell the perils of poor Ma Hsin-i in 1867, early communicated to me the true account of the matter; viz. the nervous fear of the Futai for his own safety.

The Examination as usual consisted of three sessions, beginning on the 8th, 11th, and 14th of the 8th month respectively.

During the first session Essays were written on three Texts from the Four Books; and a copy of Verses on the famous Tide of the Chekeang. The Texts came from the 'Analects,' the 'Doctrine of the Mean' (p. 297 v. 6 Dr. Legge's ed.) and Mencius. This last consisted of a simple ejaculation on the greatness of Yaou as a Sovereign. In the second Session the Essays were five, on texts taken from the Canonical books, Yih, Shoo, Sze, Ch'un-ts'ew, and Li-ki respectively. And in the last session Questions were set on points of criticism, history, antiquities, &c.

The first session is known to decide for the most part the fate of those who fail in the examination; and the successful men make their highest marks in it.

A Report of the Examination appears about a month after its close in the shape of two pamphlets. The one called "A Record of Names selected at the Provincial Competition of Chekeang." The other Specimens of "Chekeang Fine-writing." In the former are given the names, titles, and degrees of the Special Examiners

and of the members of the Local Board with their assistants, to the number of some ninety individuals. After these follow the texts and critical questions;—and then the List of Graduates and secondary Graduates; each having his age, the district or department in which he took his bachelor's degree, and his class in the baccalaureate mentioned in full after his name. The ages range from nineteen to upwards of sixty. They are said to be usually entered as less than the fact. The Specimens of Fine Writing contain both Themes and Verses, mostly by successful Candidates, but some by members of the Examining Board; those of the latter having appended to them the complimentary notes of friends and colleagues. I do not know by what principle the selection is made. But each has to be sanctioned by the Special Examiner.

A Translation of an Essay on the text from the Lun-yu by Tseang Tsung-li of Yu-yau, senior Ku-jin of Chekeang.

Text.—If it may not be in the way (of duty) he does not shun (poverty and mean estate). If the Good Man forsake virtue what right has he to his name? (1)

To broach the Text.—Not to *shun* is a more stringent precept than not to *rest in*. (2) The object *achieved* is a great one.

To supplement the Text.—Through the desire to shun poverty and mean estate men will forsake virtue at the same time. The Good Man on the contrary rests in them; and manifests all the more clearly his indifference to wealth and honours; manifesting at the same time his single anxiety to do nothing unworthy the character of a Good Man.

Exordium.—"When Heaven afflicts men with troubles they have not deserved, it does but bestow on them the highest possible commendation. But some look for the Good Man amongst glory and splendour; do not be surprized that (there) very ordinary persons form the majority. When what is appointed contrary (to one's merits) is accepted without reluctance, there is then no disgust (at actual circumstances) and even less hankering (after others). And it is but the body that suffers whilst the mind is well pleased. The one is forgotten and (thereby) the other is gained. (3) For we know that the maintenance of principle in the midst of affliction, is more strenuous than in prosperity. So then my retention of that *rare modicum* (sc. virtue, which differentiates man from animals, and the Good Man from the crowd) (4) properly depends on my being able to hold fast my *distressed condition*. (5) But this is a hard saying for the crowd."

To put the Collar to the Text, or better, To use the Text as a Collar.—Poverty and low estate are the aversion of mankind so that the heart early goes out towards wealth and rank; and its (natural) bias certainly tends *to shun them.* (6) It is not perceived that though there are in the world conditions (apparently) without rule, there is no such thing as the heart without rule. (7) When I shun a condition which is not strictly my due and at the same time forsake the indispensable (rule of virtue), (8) how can I be in the right. However (in these things) the *Good Man* sits apart (from the crowd).

Two parallels of the Commencement.

From the earliest times it has never been possible to search to the bottom the causes of adversity. Wealth and prosperity are allotted to the crowd; misery and mishap on the other hand are given to the wise. Providence (9) can hardly decline the imputation of unvirtuousness. (10) But the *Good Man* regards it all as virtuous. (11) When the coarse food and cold water (12) are acquiesced in; it is all the more credible that tripods and bells will be dispensed with. Poverty and care have their part in the education (of the Good Man); and the world must not suspect that they are purposeless accidents.

Suppose we look at the dispensations (of providence) to the well regulated and to him who rejects rule (respectively). Many every day miss their due reward. Affluence and prosperity go to the crowd and narrow circumstances and adversity belong in one case out of two to the wisest. Providence again cannot but incur the blame of unvirtuousness. Yet the *Good Man* classes these things as the appointments of virtue. The patched robe (13) brings no disgrace; *a fortiori* the chariot and the diadem, no glory. Rare attainments in virtue imply anguish of heart; and the world ought not rashly to impute this to what they call a fraud of destiny.

To alter the Text.—He shuns not because his heart does not swerve towards wealth and honour; but by consequence acquiesces in poverty and mean estate. Hence we see that (as above) there are conditions in the world apparently without rule but nowhere a heart without its rule; and that when he shuns not what is not strictly his due it is because he will not give up (principle which is) indispensable to him. But how can mankind perceive this! Thus does the Good Man sit apart (from the crowd).

Two parallels of the Centre.

Let it not be said; Heaven is crushing me! let it not be said; Men are wronging me! Though sometimes the obstruction (as it seemed) turns out to be a thoroughfare, it is possible also—(a higher hope)—in thought to control the wheel of mutability (14) and we must not pry into (the ways) and try to usurp the sceptre of Providence. And we know that to create destiny and to acquiesce in (one's) destiny are efforts of the same order (alike divine).

Do not nourish discontented and cavilling thoughts. Do not nourish hard and grasping thoughts. Though yours be a lot of utter poverty without a turn of prosperity; yet (bethink you) blossom and decay divide the sum of all worldly estate; and the way of the world is not limited according to virtue and vice. And we know that to develope to the utmost one's natural (endowments) (15) and to bear patiently one's natural (condition) are one and the same in principle.

To utter the whole Text.—What is the reason (of all this)? (The answer is) Virtue. And it is this that makes the Good Man what he is.

Two parallels of the Close.

To attain to full sympathy with Heaven is a truer perfection than the (innocency of) childhood. To gain this it is necessary to pass through sorrow and distress, and thus to put the edge on one's conduct and (moral) character. But if so, how do we explain the honour and glory of so many people of the world and the reputation they enjoy? In short the heart is pure in proportion as it is simple (淡= *akeraia*) and nature advances in proportion to the afflictions it endures. In the pit (of humiliation) is set up the admiration of mankind. In the pit (of humiliation) is found the virtue of Heaven. Else we must convert loss and gain

If one has the reputation of virtue, happy accidents must be put out of the question. He must wait calmly until under the pressure of calamity, at his last extremity, he begins to prove the strenuousness of his principles (by his conduct). But given a plentiful board and sumptuous array (lit. thick shoes), and when will you see virtuous practice. In fine he who can bear with meagre fare in worldly things will taste the rich flavour of moral principle. In the lowest obscurity there will be no wavering of purpose. In the lowest obscurity there will be the perfection of virtuous effort. Otherwise (the Good Man) will be like one dwelling in the

into fullness and emptiness (respectively)* and what becomes then of the hope of the philosopher (lit. the scholarly or orthodox profession 儒業)? Change sorrow and ill-luck for joy and peace and the stedfast purpose is (at once) overthrown. And where will the gem of price then be obtained however much we may desire it?

depth of the hills suddenly shifting from one spot to another. Or like one staggering in the midst of a high way, when all at once he foregoes his plain living to add (if he may) to his splendour. And what hope then of his making his mark by the (absolute) polish of his moral performances.

To conclude. (16)—It is by *Virtue* (the Good Man) *achieves his name.* In this (and no other way) *the Good Man* is what he is. And the sum of the whole matter is that *never* for a single instant may *virtue be forsaken.*

NOTES.

(1) The Text occurs in a passage on the *Keun-tsze* "superior man" as Dr. Legge, *for want of a better term,* has rendered it. Etymologically it is the son of a King, the Prince or Princely Man. The (ideally) *Good Man* seems to me to express as much as "the Superior Man," and to read better. Dr. Legge's version of the complete passage of which the text is a part is as follows (See "Analects" p. 30).

"The Master said; Riches and honours are what men desire. If it cannot be obtained in the proper way they should not be held. Poverty and meanness are what men dislike. If it cannot be obtained in the proper way they should not be avoided. If a superior man abandon virtue how can he fulfil the requirements of that name?"

The text begins with the second clause commencing "If it cannot."

My teacher would make *Keun-tsze understood* the nominative to the verb *shun* ("avoided." Dr. Legge) which like *forsake* ("abandoned." Dr. L.) in the last sentence is *kh'eu* in the original.

(2) In the former part of the passage *ch'oo* rendered *beheld* should rather be *dwelt in, rested in.* The closing words are *ch'ing ming perfect or achieve the name;* of which Dr. Legge's version

* The *argumentum ad hominem* reminds me of Psalm XXIII, 15, so far as the form is concerned.

and my own are paraphrases. The point in the "Broaching of the Text" is to draw attention to the three key-words *shun, rest in, achieve.*

(3) The Good Man able to overlook his *sufferings* is able thereby to attain inward *joy.*

(4) *That rare modicum.*—See a remarkable passage of Mencius (§ 332-3 ed. Dr. Legge). "When Shun was living amid the deep retired mountains, dwelling with the trees and rocks and wandering among deer and swine, the difference between him and the rude inhabitants of those remote hills appeared *very small.* But when he heard a single good word or saw a single good action he was like a stream or river bursting its banks and flowing out in an irresistible flood." I have rendered 幾希 (Dr. Legge's 'very small') by 'rare modicum.' I have quoted from Mencius the passage which seemed to me the most interesting. But see also IV, II, XIX, I, (p. 201 ed. Dr. Legge) which the Essayist probably had in mind as his *locus classicus.*

(5) 'Hold fast my *distressed condition.*' Of Mencius VII, I, XVIII, I, (p. 333 Dr. Legge). "Mencius said: Men who are possessed of intelligent virtue and prudence in affairs will generally be found to have been in sickness and troubles."

(6) "*To shun them* viz. the remoter antecedent *poverty and low estate.*

(7) The heart, with its innate knowledge of right and wrong is "a law unto itself."

(8) This sentence literally runs; 'When I shun what I need not have and therewith forsake (or shun) what I of course have.' This, my teacher explains of *an unhappy lot* which I do *not deserve* and the *rule of principle* which as a man I can *in no way be free from.*

(9) '*Providence.*' So I have rendered the words 造物 *Tsaou wuh, the creation* or (query) *the creator of things.* My teacher gives *Heaven* as the equivalent. He quotes the Yi-king for the phrase 造化萬物 Tsaou-hwa wan-wuh. My reading being very limited, it was new and interesting to me to find so active (so to speak) a synonym for nature.

(10) *Unvirtuousness.* In the original *puh jin* (不仁) not benevolent, or adopting the wider meaning of *jin, not virtuous.* This seems to be the usage of *jin* throughout the piece.

(11) Compare St. Matthew XI, 19.

(12) "*Coarse food and water.*" See Conf. Analects p. 64 (Dr. Legge). "With coarse rice to eat, with water to drink, &c., I have still joy, &c." *Tripods and bells* are the symbol of wealth and rank cp. M. Aurelius Antoninus "torches and statues and such like shew"—p. 13 ed. G. Long.

(13) *The patched robe* see Analects p. 89 (Dr. L.) "The Master said: Dressed in a tattered robe quilted with hemp and standing amongst those who wore fox skin and badger's fur, yet not ashamed, such was Yew!"

(14) I have no better illustration at hand than a well-known song of which the first and last lines are:

'Turn, fortune, turn thy wheel and lower the proud;
For man is man, and master of his fate.'

(15) See 'Doctrine of the Mean' p. 279-80 which Dr. Legge renders: "It is only he who is possessed of the most complete sincerity under heaven that can give full developement to his nature." Where the *complete sincerity* is held to be an attribute of the heaven-born saint (聖 *sheng*). So that the assertion is that by acquiescing in our natural lot we rise in some sort to the rank of the saint.

(16) Here each principal word of the text is found interwoven in the closing sentences; except "*the way*"—which is implied in what is said about the indispensable *virtue*.

The logical divisions of the Essay which I have given in *italics* are not of course printed, nor written in the original. They were supplied by my teacher, and are of the essence of the theme of the present day (having come into use at the close of the T'ang dynasty, about 1200 years ago) answering in some sort to the *Barbara celarent* &c. of formal logic; but with the difference that the Chinese terms, are intelligible. The whole frame-work of the Essay is compared to the human body or dress. As far as the close of the exordium is said to represent the cap, head, and neck. To these succeeds the *Collar;* then the first pair of parallels for the *arms;* the *utterance or display of text* with the *second pair of parallels and display of the whole text*, the *trunk;* the *last pair of parallels, the legs;* and so to the *conclusion.*

Dr. Williams (Middle Kingdom, vol. I, 441) characterises the style of Chinese Essayists as *jejune* and their reasoning as "*in a circle.*" It would be difficult to refute the charge, at least until many more Europeans shall have lived "twenty years in the country" and become really more than "sinologues" viz. 'Chinese

Scholars.' But it must be borne in mind first that Bacon and his discoveries in logic are unknown in China, and secondly that what examiners ask for is rather a work of literary *art* than of logical *science*.

With all its defects the Essay I have attempted to translate has afforded me a great deal of interest both from the real importance and difficulty of its subject, and the clear and complete *stoicism* of the philosophy it embodies. Not only the thoughts, but the phraseology also, again and again remind one forcibly of (the only example of *stoical* writing I have at hand) the Emperor Aurelius' 'Thoughts,' (Translated and edited by George Long). I will quote only one passage in illustration of what the Essayist says concerning the *equality* or similarity in principle of *defining fate and acquiescing in one's fate*.

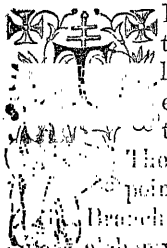
"Live with the gods. And he does live with the gods who constantly shows to them that his own soul is satisfied with that which is assigned to him." (M. Aur. Ant. Thoughts, v. 27, p. 74, ed. Long).

One misses in the Chinese, as in the Roman Emperor, the warming quickening presence of the *revealed* Deity, and of the Mediator who alone can truly harmonize and unite earth and heaven, and man with God. But the theology, or however the moral philosophy, of the theme is much higher than the popular creed concerning the apparent inequity of the lots of the good and bad respectively. That creed is embodied in a wellknown inscription usually suspended in the Ch'ing-hwang-meaou. "The good are sure to flourish. When the good do not flourish, the cause is an unpaid debt of sin on the part of their forefathers. When the debt of sin is paid off, they are sure to flourish. The bad are sure to perish. When the bad perish not, there is a balance of virtue to the credit of their forefathers. When the balance is exhausted they will certainly perish."

ARTICLE IX.

CHINESE CHEMICAL MANUFACTURES.*

By F. Porter Smith, M. B.



HERE is a body of men in China called Taouists, the professed followers of *Lau-tsze*, the great philosopher of China. Their studies have embraced every department of knowledge, including especially the subject of alchemy, as an art and as a science. The Rev. J. Edkins, a veritable Christian Taouist, pointed out in a communication made to the Hongkong Branch of the Royal Asiatic Society in the year 1855, that alchemy was pursued as a practical study for two centuries (?) before the Christian era, and for several centuries after that period. He argues from the facts that, as the Chinese were possessed of this knowledge long before alchemy was studied in the West, and the Arabian or Mohammedan traders who were the reputed discoverers of this art, had frequent and early intercourse with China by land and by sea, this interesting branch of knowledge was borrowed from the Chinese as the first professors of this true science. In the pursuit of some flux by which the dress of animalism was to be purged away, and the higher part of man's nature to be crystallized out and sublimed into some stable and eternal form, these Taouists practised fasting, discipline, worship, the use of charms, and the search for a sovereign remedy for all the ills of life. More essentially Chinese than the followers of Confucius, these students of nature started with the study of that oldest scientific book in the world, the *Yih King*, or Classic of Changes, hoping to wring from it some reply to their deep-searching cry for the truth as it is in nature.

Referring to the "Notes on Chinese Literature" by Mr. Wylie, we gather that the earliest work now extant on the subject of alchemy is the 參同契, *San-t'ung-k'i*, by *Wei Peh-yang* of the

* Read before the Society on 25th January 1871.

2nd century after Christ. 葛洪, *Koh-hung*, better known by the name of 抱朴子, *P'au-p'oh-tsze*, who lived in the *Tsin* time, during the close (in the early part of the 4th century after Christ) of that dynasty, was a voluminous author on alchemy, materia medica and other kindred subjects. He is largely quoted in the *Pen Ts'au Kang Muh* as an authority on chemical and medical subjects. Many other authors have included the subject of transmutations in their writings.

As the result of these researches, pursued with all perseverance but no success in finding the Elixir of Life or the Philosopher's Stone, the Chinese of the very present day have a number of exceedingly simple and economical processes by which they obtain tolerably pure mercurial and other preparations, of the greatest service even in their now unskilled hands. Their apparatus is of the very rudest character, and their materials are often of the most unexpected kind, but with these they can manufacture calomel and vermillion of the most beautiful description.

The manufacture of enamels and porcelain formed another field of chemical research, carrying them to the same effective results, produced they knew not how or why. The taste for colouring vessels, walls, scrolls and some few other objects led them to the study of the metals iron and copper, from which they extracted red and blue pigments. The manufacture of fire-works has been also a means of increasing their chemical knowledge. These artists, called 烟火家, *Yen-ho-kia* learnt the use of iron, camphor and other secret substances, by the addition of which the flame is altered or intensified. It has been long known to these numerous manufacturers that by the addition of a small quantity of arsenic the noise of crackers is rendered much louder and sharper. The preparation of pigments for artists of whom there are described in authentic works some 1,607 celebrated names, has been a stimulus to the manipulation of minerals. To this day the Chinese White is to be found in the colour-artists' shops all over Europe as the best pigment of that description. The manufacture of ink, that most potent agent, has led to several curious observations of a chemical nature, of which more presently.

Much trouble is often taken by members of the Sinological order to invent new names for old things in China. Chemists have been known for hundreds of years in Chinese works as 丹爐家, *Tan-lu-kia*, or 丹鼎家, *Tan-tsau-kia*. The name *Tan-kiu*, a shortened form, as well as the other terms, is applied in works to what may be called the manufacturing chemists of China.

A very fair chemical nomenclature may be constructed out of the plentiful terms quoted in the *Pen Ts'au* from the writings of these alchemists and physicians. 丹, *Tan* stands for oxides, when preceded by some specific character. This word does not mean exclusively a red substance such as cinnabar, but may mean some yellow, white or red preparation. The dot in the centre of this character stands for the fire, that servant of the alchemist, and the rest of the character, sometimes written in the inverted form with the legs turned up, will do for the furnace, or crucible of the operator. 礬, *Fun* is the equivalent of the old chemical word vitriol, or a sulphate. Other similar terms may be found to express many conditions of inorganic matter, by those willing to search for them. Something like a hint at testing substances is found in the *Pen Ts'au*, where the antipathies of drugs are treated of. The extrication of ammonia when lime is heated along with sal ammoniac, the discoloration of silver and salts of lead by sulphur, and other instances might be adduced as evidence of some vague notions of the reactions of chemical substances. Something like an attempt at the statement of the equivalent composition of substances is seen in one of the names of Æthiops Mineral, sometimes called 二氣砂, *Rh-k'i-sha*, or the "two-natured salt."

It will be better now to proceed to the particular discussion of the subject in hand, "Chinese Chemical Manufactures," by taking them in detail.

In the making of Gunpowder the Chinese have practised a good deal of chemistry unconsciously. The manufacture of nitrate of potash from the efflorescent salts which are found on the surface of the soil, and on walls and places charged with urine, is carried on on a large scale in China. The properties of sulphur are well known to Chinese writers. It is procurable in large quantities from the sulphur-pits near Tamsui and Kelung in Formosa, as lately pointed out by Mr. Taintor in the Customs' Reports for 1869. The red amorphous sulphur, called 石亭脂, *Shih-ting-chi*, probably produced by the accidental mixture of some fatty substance with the ordinary brimstone of commerce, is fairly described in Chinese works. The composition of Chinese gunpowder, called by them "fiery medicine" is not very different, in some cases, from that of English powder. The charcoal of the Willow and the Cunninghamia Sinensis or Chinese Pine, is used in the manufacture. The Chinese are aware of the disinfecting and insecticidal powers of sulphur and arsenic. They enter into the

composition of pastilles for getting rid of mosquitos, and the good effects of the gases resulting from the burning of crackers as expellers of evil influences are appreciated by the Chinese in some quarters. The alkalies soda and potash are turned to some account, although nitre and soda, or natron, are often confounded together. Carbonate of soda is brought from Mongolia, where the soil is charged with this alkaline substance, and requires no manipulation to render it useful as a means of raising bread. Potash, or pearl ash, obtained by burning the rank herbage of inland districts is also to be met with in China. Tsi-nan-fu in Shantung is, or was, the seat of this rough manufacture. Both of these alkalies are used in Pehchihli to make a coarse soap, a branch of chemical manufacture which might be well taken up by the Chinese, and subsidised by Missionary Societies. Ferrocyanide of potassium, a beautiful yellow salt, is made in Canton and by Cantonese in other parts of China, by burning dry refuse of animal substances, such as horn-parings, to a red heat with pearl ash and a quantity of iron-filings in a covered crucible. The process is kept a profound secret, as far as possible. The importance of this salt, sometimes called yellow prussiate of potash, is its employment along with alum and sulphate of iron to make that beautiful dye Prussian Blue—called "foreign indigo" by the Chinese who largely wear the livery of this conservative colour.

The ashes of Polygonum-plants, forming a rough salt of potash, were formerly used as a flux for minerals, and as an addition to cane-juice to neutralize the acid present. This latter purpose is now fulfilled by using lime, a chemical substance formerly handled by experimenters. Sulphate of soda, named 玄明粉, *Hieun-ming-fen* after *Liu Hieun-chin*, the Glauber of Chinese alchemy who flourished during the reign of the second *T'ang* emperor, has received much attention at the hands of Chinese operators, who give minute and ridiculous directions for the purification of this salt which is found as an efflorescence upon the ground of some parts of the country. It is, naturally enough, confounded with the natural nitrates of potash and soda so common in both China and India. It was anciently believed to be one of the substances capable of inducing longevity, and to be a panacea for most sicknesses. Sulphate of magnesia, or Epsom Salts, is referred to in the *Pen Ts'au* as a "bitter nitre," prepared from the mother-liquor of the salt-pans. Judging from the deliquescent character of all the salt made or met with in China, the plan of removing this magnesian

element from the crude salt is not practised at the present time. The phenomena of deflagration and crackling of salts of potash and soda are so frequently referred to in Chinese works as to lead us to believe that they practised something equivalent to our blow-pipe examinations of substances. The use of fire to distinguish arsenical substances, such as black (metallic) arsenic, white arsenic (arsenious acid) and yellow arsenic (orpiment), as by the varying smell of these substances, indicates a step in the direction of practical chemistry. Passing on to alum, as the last of these alkalies, or alkaline earths, we touch upon an interesting subject. The making of alum, as at Wan-chau-fu in Chehkiang province, from the alum-shale of the hills of that prefecture, is an extensive business. The alum is exceedingly pure and exceedingly cheap. Its uses in sizing paper, in making mucilage, and in many chemical and economical processes are even less important than its employment day-by-day in the purification of drinking-water, a chemical operation. The Chinese formerly employed carbonate of soda for this purpose, thereby yielding a much softer water than the alum-process does. The author of the *Pen Ts'au* curiously enough recommends the use of leaden vessels to hold water, liable to produce goitre.

Metals have received much attention at the hands of the Chinese who revel in alloys, and love the cheap thunder of gong-metal, and the musical ring of pieces of silver. Copper is regarded by Chinese writers as more friendly to the human constitution than iron, and they prefer the former metal for the making of cooking and washing vessels. Malachite is well known to them, and sulphate of copper or 石胆, *Shih-tan* is described in their works, although never met with in Hankow. Steel needles dipped in a solution of sulphate of copper have been sometimes sold to foreigners as curiosities in the way of well-tempered metallic copper. Although aware of this decomposition of one metal by another, the Chinese have misunderstood it, and they have been led into the assertion that one metal undergoes conversion into the other. Verdigris (銅青), a basic acetate of copper, is easily procured by the action of vinegar on plates of copper. Vinegar is the only pure acid substance known to the Chinese. They use it as a solvent, and by sprinkling it upon minerals exposed to the fire they bring about oxidation and solution of these substances. It is curious that they have never learnt to distil acetic acid from their strong but rank vinegar. Verditer (銅綠), a carbonate of copper,

is largely made by the Chinese in Hupeh, and is mixed with rice-starch for some reason best known to themselves. It occurs in small, thin, square, pale-green pieces, and is used in dyeing sha-green cases for pipes and spectacles. There is a process described in a Chinese work by which wood to be placed in water is preserved by previously dressing it with acetate of copper solution. This is something like the Kyanising process, in which corrosive sublimate is similarly employed. Iron, a metal abundantly bestowed upon China, yields oxides, and the sulphate of iron in various forms. The black oxide of iron dissolved in vinegar was formerly employed by the Chinese as an ink. The characters were written with this solution, and the pencil, dipped in the ordinary Chinese or Indian ink, was used to trace over the characters on the other side. The red sesquioxide of iron is made on a large scale by heating impure sulphate of iron to a great heat. The hotter the fire the better the colour, so the *Pen Ts'au* says. This rouge is used to colour porcelain, and to redden walls of temples and palaces. Sulphate of iron (皂礬) is made in a crude and cheap form by mixing together sulphurous coal and hepatic iron pyrites, and covering the heap with mortar and mud to prevent the access of air. Spontaneous chemical action occurs, and the mass which results is treated with water, and the rough green salt is crystallized out. This is sold at a very cheap rate, and is much used as a dye, after mixture with galls or other substances. It makes a very good disinfectant for sewers, urinals and the night-stools of the sick-room. A preparation of great beauty, called 鐵華粉, *Tieh-hwa-fen*, is made by acting upon sheets of iron with vinegar. It resembles the citrate of iron in its appearance. The Chinese seem to be aware of some sort of identity of the colouring matter of the blood with these iron-preparations recommended in diseases of the blood.

Lead is scarce in China, comparatively. It is spoken of as the "black metal," and is regarded as masculine, and the progenitor of the five principal metals. Lead, zinc, antimony and pewter are not carefully distinguished. There was formerly considerable communication between Persia and China. Persia sent lead, zinc, ores of silver and amalgams to China. Argentan, or German silver, called 白銅, *Peh-t'ung*, is an alloy of copper, arsenic and zinc, largely prepared for use in making tobacco pipes. The use of sal ammoniac as a test for these alloys, showing them to contain copper and to be not silver, is another item of chemistry met with

in the *Pen Ts'au*, the manual of the Chinese chemical manufacturer. Acetate of lead (粉霜) is a salt much extolled by Taouist writers as a styptic remedy. A plan of making a salt, supposed to be an acetate, is given in the *Pen Ts'au*, by which an amalgam of fourteen parts of lead with one of mercury is acted upon by vinegar. This must issue in the formation of white lead, a salt made at many places in China, and largely used as a paint and as a face-powder. It would be curious if it should turn out, as may be expected, that an amalgam of lead and mercury, the latter being in very small proportion, is much more readily acted upon than the fine metal, by vinegar. White lead was known in the days of the Great Yü, the engineer-monarch, and most certainly during the *Shang* dynasty. Shin-chau in western Hunan, and Kwang-sin-fu in Kiangsi, being both in the midst of rich mineral tracts of country, have been long famous for their chemicals. The most interesting and important substances of all, are the mercurial preparations made for ages by the Chinese. Mercury, called "water silver," the exact equivalent of the Latin and Greek names for quicksilver, has had a mysterious attraction for the Chinese alchemists. Its liquid and volatile character, the beautiful colours of its compounds, and the powerful effect of its preparations, all tend to render it the hope of the chemist in search of omnipotent gold or immortal drug. Cinnabar (丹砂 or 朱砂), the most frequent ore of mercury, is also made artificially on a large scale in Hankow and other places, by fusing a mixture of sulphur (two catties) and mercury (one catty) and subliming it. To give a sample of Chinese philosophy, it may be observed that one author quoted in the *Pen Ts'au* says that by the absorption of the spermatic (or *Yang*) principle a crude matrix is produced, which in a period of two hundred years becomes pure cinnabar. This in two hundred years becomes lead, in two hundred years more it is silver, and in two hundred years more of gestation it becomes pure gold. The nature of this sulphide of mercury was thoroughly understood by the early Chinese operators. The power of raising men to the rank of the eight jolly immortals called 仙, *Sien*, or "genii," was asserted of this mysterious substance which defied heat and came forth a pure and mobile metal. They called it the 仙丹, *Sien-tan*, or "philosopher's stone," a name perhaps more properly assigned to a substance formed by the mixture of some eight substances. More than ten sorts of cinnabar are described in old works. That from Shin-chau-fu in Hunan has had the

greatest reputation, and given its name (辰砂) to this chemical. Vermillion (銀朱) is made in much the same way in Hankow as the cinnabar which has the same chemical composition. The crystalline sublimate formed on the sides of the vessel is carefully powdered between two stones turned by the hand, a little water being added from time to time. The pasty mass is then carefully levigated by mixture with pure water, decanted and dried upon tiles in the sun, in just the same way as described by Dr. Williams in his "Chinese Commercial Guide." The more patiently and carefully the cinnabar is powdered and washed, the finer is the colour of the resulting vermillion. It is packed in glazed black paper, and exported in large quantities. Æthiops mineral (靈砂) is a common drug used in medicine as an alterative, and made by melting two Chinese ounces of sulphur, and then adding to it half a catty of mercury. The mass is taken out, powdered and sublimed. It is sold in heavy, broken pieces of a brilliant maroon or purplish-red colour, and crystalline or striated in structure. It corresponds exactly to the old officinal preparation of European Pharmacopœias. Calomel (輕粉) is made in large quantities in Hankow in much the same way as that given by Mr. Pearson in the third volume of Sir J. Davis's work on "The Chinese." Common salt, mercury and alum, or salt, mercury, sulphate of iron and nitre are rubbed together in certain proportions, and put into an iron platter which is covered over with a roomy earthen dish well luted down. This is exposed to the heat of a strong charcoal fire for four hours, when water is thrown upon the upper pan, and the removal of it shows the calomel condensed in the form of a beautiful, white, glistening feathery sublimate upon the inner surface of the upper dish. It is the delicate appearance of this preparation which probably has induced the Chinese to call it the "light powder." It is often adulterated, as Mr. Daniel Hanbury has pointed out in his valuable "Notes on Chinese Materia Medica," with selenite, or sulphate of lime, which happens to be of nearly the same weight and crystalline form. There are some seven or eight manufacturers of this drug in Hankow. It sells at a price varying from six pence to a shilling per ounce.

Corrosive sublimate (白降) called literally "white precipitate," is also made in Hankow by a very complicated way, by fusing together nitre, mercury, borax, sal ammoniac, orpiment and massicot, and subliming the mass in the same way as the calomel. A very good crystalline preparation is obtained, which is used only

externally as a caustic. The lead is added on medical, and not on chemical, grounds as it is supposed to correct the poison of the salt. Red precipitate is made by putting nitre into a small boiler and melting it, alum being afterwards melted and incorporated with it. Some mercury is put into the middle of the mass, and after covering it over with a small dish, the whole is heated for about an hour and a half. The heat is at first gentle, and is then gradually increased. The red precipitate, or red oxide of mercury as it is, is taken out in the form of sublimated scales of a bright brick-red colour. A nitrate of mercury, mixed with the red oxide, is sold under the same names (紅粉 or 三仙丹) as the red precipitate. A Tarbeth mineral, or yellow sulphate of mercury is also sometimes made by the Chinese.

Several metallic substances, such as Minium and Massicot, have been purposely passed over in this very brief and hurried sketch.

One more chemical substance, of an organic or animal character shall be named as the last of this list. Urea, called 秋石 *Ts'iu-shih*, is a regular article of manufacture from human urine at Ngan-king fu and Chi-chau fu in Nganhwei province. This substance, mixed with the other constituents of the excretion, is obtained by boiling down urine, sulphate of lime or common salt being added to hasten the crystallization, and to increase the quantity obtained. It is used to soften fresh meat required for immediate use, and is used in medicine.

Sufficient evidence, it is hoped, has been produced to show that there is such a thing as Chemistry in China, and that those who take upon themselves to teach the Chinese Chemistry, would do well to first address themselves to the explanation of processes and terms already in the hands and mouths of the Chinese for many hundreds of years.

ARTICLE X.

JOURNAL OF A MISSION TO LEWCHEW IN 1801.*

Shi Liu-kiu Ki 使琉球記 Journal of an Envoy to Lewchew. Published by Li Ting-yuen, the Envoy, in 1803. One vol. in 6 sec., p.p. 290.

By S. WELLS WILLIAMS, Esq., L.L.D.

IN the number of this Journal for December, 1866, page 85, is a translation of the request made in 1807 by Sioho or Shanghau, then nominal ruler of Lewchew, to the Emperor Kiaking, to be invested with the full sovereignty of the Kingdom by the hands of an envoy sent for that purpose. In that paper he states that his predecessor Siowo or Shangwăn had received his investiture in 1801, but had died without issue in 1803. The work above named is the journal published by the junior member of the Imperial Commission dispatched from Peking to accompany the Lewchewan delegation to Shudi in 1801, in which he narrates his observations in a lively style, and furnishes a fair idea of the civilization of the people, with notices of their government, customs and products.

The author Li Ting-yuen 李鼎元 was a native of Mien chau in the north of Sz'chuen on the banks of the River Tau; and at the time of his appointment was under-secretary in the *Nui Koh* or Inner Council, and had been an examiner in the Hanlin Academy. He says that in 1784, he took a ramble in Chehkiang, and had a dream when at anchor in the port of Wănchau, that prognosticated this expedition to Lewchew, and as he afterwards thought prepared him for it. The chief in the mission was Chao Wăn-kiai 趙文楷, whose style was Kaishan 介山, a man from Tai-hu in Nganking prefecture in southwest of Nganhwui, who had attained the high degree of *Chwang-yuen* or first wrangler in the year 1797.

* Read before the Society on 27th February, 1871.

They received their commission in August 1800, and left Peking in company with Hiang Kwoh-yuen 向國垣 and Tsăng Mu-tsin 曾謨進, the two envoys from Lewchew, on the 28th day of the 2nd moon (March 24th, 1801). Li "burned incense early that morning, and looked towards the palace to thank the Imperial Favor; bade farewell to his mother at noon, and started from Rice Market St. [in the outer city] on his travels." His associate had preceded him some days, but both reached Fuhchau on 2nd June, and went aboard ship the 22nd or summer solstice.

The first two chapters are taken up with Li's diary down the Grand Canal to Chinkiang and thence to Fuhchau through the maritime provinces, *viâ* Hangchau, Wănchau and the River Min. This portion furnishes many historical facts relating to the towns and streams he visited, and shows wide reading and attentive observation; but the design of this article does not include them. In crossing the Yellow River to Tsingkiang-pu, the party were placed in large boats fitted to withstand the current, and its chiefs performed their devotions to procure a safe transit—an index of its power seventy years ago, where now are fields and roads.

This Journal presents the observations of an intelligent Chinese officer, who desired to inform his countrymen of their own and other lands; and its value is of course to be estimated chiefly by the attainments of the author and his readers. His was a mission in which the self-glorification of the Chinese official might be expected to appear in its strongest features; and Li, a representative of the high and unapproachable *Tien-tsz'*, Son of Heaven, himself styled *Tien-shi* or Heaven's Envoy, and vicariously receiving the humble prostrations of a whole nation, would conclude that the whole world indeed existed by the kind permission of his Augustus. But there is nothing of the kind in the book. No comparisons are made, and he tries to state without disparagement the attainments of the Lewchewans, with whom he could only communicate through interpreters, and whose kindness, curiosity and eagerness to learn about China he often notices. There are no speculations about the desirableness of occupying their group by the Emperor's forces, and the advantages of having its trade centre in Chinese ports; but rather a tone of respect pervades the journal for a people so well and methodically governed, whom still he ranks as *i-jin* or barbarians.

Our extracts are taken successively, for not one day is missed from the day he left home till he returned to Fuhchau, and those

have been selected which would furnish the most characteristic features of the islanders and their country. The author's account of his voyage to Napa is quoted nearly entire, commencing on the day he went aboard at Fuhchau.

June 22nd, 1801. Clear. On previous occasions, the officer sent to confer investiture on the king of Lewchew has left at the summer solstice with the southwest monsoon, and returned at the winter solstice with the northeast wind; for these winds can then be depended upon. At dawn all our attendants were therefore ordered to carry the baggage on board; and at noon the presents were all ready at the Lung-tsai hall to be put into the ship's hold. The envoy and I went to the hotel at Nantai, to call over the names of the guard and attendants and send them all on board the two vessels. We went aboard one of them. It had three masts; the main one was more than 70 feet high and 6 feet around, made of foreign wood; the others were over 60 feet high. There were 24 holds, with ballast in the bottom, and they can carry about 110,000 catties of cargo. At the "*dragon's mouth*" (the bow), is a large cannon, and two others in each waist; the soldiers' equipments were arranged along the sides, and their arms put in the hold. The envoy's flag, a pennant, a particolored banner, and a wind-vane, all floated at the mast heads. Two yards were on the mainmast, from which, by means of pullies, the guns could be moved and the sails raised; a score or more of men could do this.

The large hawser was 18 [Chinese] inches around, the other 12 inches; the three anchors were of iron-wood, shaped like the character 个, and served instead of iron grapnels. Above the deck was a platform for fighting, and on the after cabin was the general's post; this room was encompassed with the rattan shields, and used as the envoy's hall of reception. Under it was the rudder-room, before which was a little compartment partly filled with sand for the compass. Besides the officers, there were men to work the leachlines, raise the anchor, and hoist the yards, each of whom had their own accommodation below. The companion-way was in the main hold, which was six feet high; here the envoys messed. On each side were two rows of berths called *mali;* the upper was marked off into three divisions, and the lower into six. The masters slept in the first, their servants in the under row, each berth holding two men. The powder and rice were stowed forward, where also the envoy's attendants were accommodated, while the soldiers were aft of the rudder. The four tanks were placed in this part, and the captain of the guard had his room behind them. The Lewchewan commissioner and suite occupied the cabin in front of the rudder. The second junk was similarly arranged, and each carried over 260 men, far too many for

such small vessels. There was no room to stick an awl even, and we (the envoys) not liking the arrangement sent messengers to the Governor and the General, but the city gates were shut. They sent the sub-prefect and colonel next morning, but these could only regret it, and went away, saying "there's no help for it."

However, to go with this crowd was impossible, and after another consultation, the retinue was diminished twenty men, and forty of the guard were sent back,—"when the hearts of all were quieted." On the 26th a beautiful spiral cloud was seen, and with this favorable omen, they dropped down to Pagoda Island, filled the tanks, (giving the keys to the captain of the guard) and the next day got through Kinpai Pass. But before reaching it, the whole company made their adorations to *Tien-hau*, the Queen of Heaven, the Amphitrite of Chinese sailors, the envoys furnishing a pig and a sheep to divide among the crews.

June 29th. Calm. Worshiped Tien-hau with the envoy, and as soon as we had done, a gentle breeze arose. The general stationed here told the captain of the guard, named Chin, that "The pirates are still in the offing, and it will not do to sail now; I have seen a letter received from Chehkiang with this news, which said that they were roaming about here and there." We therefore told him, that if such was the case, he might have the general escort us out to sea with forty boats holding a thousand men who could easily drive them off. If the wind detained us, then wait. At noon a strong southwest breeze blew and the tide serving, we ordered Chin to tell the general to get the guard-boats ready and armed, placing them in three divisions and go out. It was arranged that if the head squadron of twelve vessels met any pirates, or saw any coming up, it was to take in sail and turn back a little; our two vessels would then hoist sail, and come on with the other two divisions, when all would join battle. If we heard cannon firing in quiet succession, the leading vessels should then turn, and we would all proceed to the fight, the two divisions flanking the sides of our vessels, eight on each side, and twenty-four others coming right after the head vessel, the jolly-boats towing alongside. Every one got into his proper place, when having scaled the guns, we spread sail and went out to sea; on reaching the Wu-humăn or Five Tiger Channel, we heard that pirates were outside, and ordered every one again to scale their guns, not only to do honor to the commissioners, but also to intimidate the pirates. At sunset we passed through the Channel and on into a narrower one, where the water was so shallow that the rudder had to be lifted a foot to let the ship pass. Seeing no pirates, we sent the escort back. Our vessels had no hour-glasses to reckon time, for although the sub-prefect had again and again been told

to provide them, he paid no attention to it; we therefore had to burn incense sticks to mark the time, and do the best we could.

In the night, Liang Hwan, one of the Lewchewan officials, ordered two of his company to keep guard over the compass, and not take their eyes off it, acting as aids to the pilot. They went five watches (or all night) by that compass.

June 30th. Clear. The south wind blew strong, and we went on merrily, hardly feeling that we were at sea. Early in the morning, two white birds flew around the vessels and then away.* At noon the wind shifted to the southeast, and after going four watches, at evening we passed *Mi-hang Yang* 米糠洋 or the Rice-bran Sea, where the waves go round and round, and the ripples are close together and small like the siftings of rice,—an extremely appropriate name it is indeed. One o'clock at night, the master told us that we were passing Kilung Head and *Hwa-ping su* 花瓶嶼 Flower-jar Island (Lat. 25° 47′ 7″, Long. 123° 30′ 31″) near Formosa, but we could not see them at all. The company on board were mostly very seasick, but I sat all day on the poop deck, and felt no qualms, eating and drinking as usual.

July 1st. At daylight, passed Pĕng-kia shan 彭家山, an island with three peaks, of which the easternmost is the highest, on its north end. At 5 o'clock, saw *Tiao-su* or *Tiao-yu tai* 釣魚臺, *i.e.* Fishing Terrace; it looked like a three pointed pencil-stand, made of naked stone.† The sea and sky were of one color, and our vessels went along on even keel, while innumerable white birds flew around, nobody knowing whence they came. At night the glimmers of the stars and the moon shimmered beautifully in the water, while the surface of the sea was brilliant with phosphorescent sparks darting up and down and disappearing, just as Muhwa says in his sea-song about the hidden fire sinking in the water.

The sailors came to us to-day, to say that it was the right time to sacrifice to the *Heh-kao* 黑溝 or *Kuro-siwo*, *i.e.* the Black Sewer; and it appears from the account of Wang, a former envoy to Lewchew, that it was the practice when the vessel reached the *Kuro-siwo*, to throw a live sheep and a pig into it to propitiate the god, and then to scare him by drawing up the guard on deck. We had now been out three days, and did not know where this Black Sewer ran; but the Lewchewan captain said, "We go back and forth here, but do not know where it is, only when we see *Tiao-yu tai* we know that the god resides there and then worship

* These are probably two white terns.

† The island here called *Pĕng-kia shan* is not found on the charts under that name; nor another one, passed by the junks the next day, called *Chih-wi sü*. The island called *Tiau-su* lies northeast of *Hwaping-sü*, and those others must be situated in that vicinity.

him out at sea, by throwing a live sheep and pig overboard, burning some silk and pouring out a libation, but we do not call out the guard." The whole of to-day two vessels were seen some scores of miles ahead of us.*

July 2nd. Clouds obscured the sun in the east. Flocks of white birds followed us from *Panghia* Island to this place, and about ten o'clock we passed Chi-wi sü 赤尾嶼 to the south; it is an island high at each end, with two peaks in the depressed centre. Two big fish kept close alongside of us, whose heads and tails could not be seen; the back was black with a tinge of green; ten men could not have spanned the body. The crew saluted them with a glass of spirits. A slight dash of rain came from the south, but after one clap of thunder, it instantly stopped. At noon a great squall came up with heavy thunder, and the wind veered to the northeast. The helmsman being away, the vessel heeled over on her side, and was in great danger. The Lewchewan officer Liang Hwan came up and reported, "The tanks leak, and the fresh water is nearly out; if this wind holds, we shall have to go back to Woga Pass, and wait for a fair wind." But when I heard how the two whales had come alongside, as if the god of the *Kuro-siwo* had helped—a most propitious omen for sailing—I asked the men to look if they were still there, and at once concluded that they had been sent before the squall to protect the vessels. I and the envoy therefore burned some Tibetan incense, knelt and besought the Queen of Heaven, praying and saying, "we are envoys who have received [His Majesty's] orders to go on [to Lewchew] and cannot go back; we are poor and old, and intend to return home just as soon as the errand is done; wilt thou, O goddess, turn the wind, and we will implore the emperor to confer additional honors upon your father and mother." I myself took an oath that I would not forget this promise,

* This notice of the Great Pacific Gulf Stream is interesting as showing that Chinese and Japanese navigators had both noticed it and given it the same name of *Heh-shwui kao* 黑水溝, *i.e.* Black Water Channel or Sewer, or Black Sewer, which has the same meaning as *Kuro-siwo*. In a subsequent date, our traveller says he was talking with the Lewchewans about this stream. They said, "We have heard that on the surface of the ocean to the westward is the Kuro-siwo, and near the sea of Fuhkien; it was formerly called *Tsang-ming* 滄溟 and *Tung-ming* 東溟; we Lewchewans do not know about this and have never crossed it. Why is this?" I replied, "Many people cross the sea, but those who write about it are few; while those who are not seasick, and sit all day on the poop deck and there write down what they see, are fewer still. One man leads and all others follow, their ears devouring his words, but who can confidently believe all he says? This is the reason why the Lewchewans, though they annually cross the ocean, still know nothing about the *Kuro-siwo*, and constantly affirm that there is none."

and had reason to be thankful for the divine compassion; for hardly half an hour after our prayer had ended, a splitting clap of thunder was heard, and the wind and rain instantly ceased, and by four o'clock the wind came out strong from the southwest. The shipmen all raised their hands in devout thanks, and unitedly cried out that the goddess had been moved to show her power as quick as an answering echo.

July 3rd. Cloudy. At noon we made the island of Kumi (or Koo-misang) with its eight peaks of different heights, some isolated and others connected; the crew cried out for joy, so that the waves danced. Soon after, a squall of rain came on and the water poured like a gutter. We then remembered that this was the day when the Ruler of Heaven 天帝 and Dragon King 龍王 had an audience with Yu-hwang Shangti; and that in two days Kwanti's storm would take place, making the three days for the festival; this wind and rain was therefore proof of this very thing. The wind was fair, and by 7 o'clock we neared the island; as it has many reefs around it, making it dangerous to proceed by night through the channels, the Lewchewans advised us to stand off and on till the morning. They therefore turned the fore sail around into the wind, which made the ship heave up and down without going ahead. When the sails are set, each of them carries a sort of studding-sail border, and the mainsail has a canvas top-sail above it; these were all taken in, but not the mainsail, which is lowered when the vessel anchors. At 9 o'clock fire signals were thrown out, which were answered from Kumi Island; in the daytime cannon are fired, but these signals are made at night, to assure each other that everything is right. At 3 o'clock A. M. a small boat came off to lead the way.

July 4th. In the morning we passed Machi Island 馬齒山 or Horse-teeth Hill; its outline resembles uneven dog's teeth, and the four peaks look like a horse racing in the air. We saw the vessel sent out from Napa to meet us far astern, but we exchanged salutes. The master (who is over 60 years old) tells me that during the eight voyages he has made to Fuhchau, he has never before come so directly across as he has this time, which he ascribes to his careful watch over the compasses. Not reckoning in the stoppages last night and the delay of four hours by the headwind, we have actually sailed 106 hours, and he reckons our rate of progress to *55 li* an hour, which makes the distance from Woga Pass to Napa to be *5,830 li** (about 1,600 miles). He also tells me that in very light winds he makes no progress, and in heavy winds it is just as bad, for the waves rise so high that they head off and impede the junk, throwing her back almost as much as she gets forward; when the wind is seven parts, and the waves five parts strong, we make most progress, as in this trip, which has been the most favorable he has ever had.

* In fact, it is barely 450 miles from Kinpai Pass into the harbor of Napa by the way they came, on a nearly due east course.

By this time, scores of canoes dug out of a single log, reached us to tow the vessel into Napa, where we found our other junk which had parted company in the squall, and where the one which went out to meet us soon came in. "I never before knew three vessels to come in at once," said the old master; and the crew all congratulated us once more.

At noon, we went ashore. The people and scholars of the land were all gathered in the road, and the Prince had assigned places to all the officials in order to properly receive the Imperial Mandate, which as soon as the gates of the temple were opened they did in regular sequence of rank.

The writer, after narrating the ceremonies on this occasion, and describing the appearance and dresses of the Prince, then 17 years old, and his state officers, enters into a minute description of the Hall called *Tien-shi kwan* 天使館 or Hotel of Heaven's (*i.e.* the Emperor's) Envoys, where the mission was lodged. He details the arrangements made for supplying their table, notices the modes of restraining their attendants by making the door-keeper give every man going out of the gate a wooden tally, so that he could be punished if one of the people was found outside unfurnished; and mentions several visits to worship Confucius, the Queen of Heaven, and other shrines. The interest in this narrative now centers chiefly in the author's notices of the customs of the Lewchewans, their government and civilization, with descriptions of the products and people of the group. The extracts will therefore mostly relate to these subjects, omitting such as describe state or religious ceremonials. The author indicates his religious feelings in many ways; he brought a priest with him as chaplain, and often quotes his sayings or doings. Li wished to spare the lives of the cattle that furnished beef for their table, and have mutton instead, because cattle were serviceable to the husbandman; and he also had the daily allowance of provisions diminished one fifth in order to save the outlay of the Lewchewan government. He also planted lichee and lungan trees, which he had brought from Fuhchau.

July 10th. To-day a kind of fish called *mao yu* or hair-fish was brought; well named it is too. It looks like bean-curd, and the taste remains long in the mouth. They appear on the first of the 7th or 8th moons, for four or five days, coming out of the ground, when the people catch them for salting and curing; the taste then does not yield to that of pickled shad, and the people of Fuhkien esteem it highly.

On the 15th of July, the ceremonies of worshiping the ancestral tablets of former kings and performing the inauguration (if it may be so called) of the youthful prince Siowo 尙溫 in the presence of all the assembled officers and people, were carried out by the two Chinese envoys. Nothing is said here or elsewhere in this journal of the presence of Japanese residents or officials in the islands, and yet it is provable that all the while the native authorities were controlled by the agents of the Prince of Satzuma, who collected his revenue and lived incognito at Napa. The Chinese envoys seem to have been utterly unconscious of this subjection.

July 16th. Remained at home to-day and played chess with the chief envoy; using the Lewchewan board. The white men are made of a kind of stone, the operculum of a sort of shell found in these seas, half an inch thick and two inches across, resembling arragonite in color. The black men are made of a dark stone. All are two thirds of an inch across, bulge in the middle, and cannot be used both sides like the Yunnan men. The chess-board is a table with four legs. The people here are fond of the game, and never allow a move to be recalled; they have also a chess champion. They reckon that the player who shows the most empty squares has won, unlike the Chinese who say he has beaten who has the most men left, when one wins he secretly thanks the god of chess and a fairy, and the spirit of Sz'ma Siang-ju,* this is a very praiseworthy, elegant custom.

July 17th. On the table to-day was a sea-snake, three feet long; it was stiff and looked like a withered rope, black, and most repulsive to the sight. They have brought a bundle of five every day, and the natives say they are heating, drive away the leprosy, destroy worms, remedy weakness and cure ulcers. They appear to be very different from the snakes in Yungchau in Hunan. I like to taste every thing, and tried them as the natives cook them, but they were nothing but skin after all, and no meat upon them.

July 19th. I was to-day reading in a book about Lewchew, and came across the phrase 颱颶 many times, but I never saw the character 颱 before, and none of the dictionaries have it. The Lewchewans define a high wind 大風 or tyfoon as a 颱颶, and the people from Fuhchau also use the term. One poet Han Chang-li or Han Wan-kung, says "The splitting thunder drives away the gale," in which sentence the phrase 颶颱 has this same sense; in one dictionary the last character is defined a tyfoon; in another, it is explained to be 海道 a path or current in the sea. It may be that the Lewchewans have mistaken the

* Sz'ma Siang-ju was a distinguished statesman in the Han Dynasty.

character, and former writers have used it without examination, so that the mistake has been perpetuated, when I get back to Peking, I must make thorough inquiry of the scholars.

This source of error is a prolific one, and has filled the Chinese dictionaries with thousands of synonymes and absolute characters, which rendered the acquisition of the language more difficult. Li Ting-yuen also gives the particulars of his excursions over the beautiful country in the vicinity of Shudi and Napa, and his visits to the temples. One day he visited the *Shen-hing-sz'* 善興寺 where there were many plants and trees like those in Fuhkien. He adds "The priests worship Heaven under the name of *Man ta tsz' tsai t'ien shin* 滿大自在天神 the Full, Great, Self-existent heavenly God, they bar the doors, and the worshipers all kneel outside. When the common people worship this God, 敬神 they offer slips of incense but do not burn it; those who wish to be very devout scatter several pinches of rice before it and go away. In this temple there is a Budhist hall dedicated to the god *Puh-tung* 不動 (*i. e.* the Unmoved, the Unconcerned), and another god having three heads and six arms, black as ink, whom the attendants told me was *Kai hwoh Tien sun shi shin* 開國天孫氏神 the God Heaven's grandson who founded the Kingdom." It would have been of great interest, if our traveler had entered a little more fully into this worship, and told us something of its origin and extent, who are the divinities here mentioned, and whether their analogues exist in China.

The Lewchewans have diligently cultivated Chinese literature, but they are obliged to use Japanese editions of the Confucian classics in order to learn to read and understand them. Several native scholars came to the embassy to discuss literary matters, but the envoys could not get along in talking unaided by the interpreters, and the parties resorted to their pencils to carry on the conversation; Li and his associates were surprised at the good style and classical knowledge indicated by these men. Five noble youths were also sent to live near their residences to learn what Chinese they could while the mission remained on the island.

It was now a time of great drought, and the envoys joined their supplications with the natives to the Queen of Heaven and God of War to send rain; it came abundantly three or four days in succession. The people sometimes get four crops of sweet potatoes or two of rice from the same field; "the people support themselves on the former, and the prince and officers on the

latter," says Li; and besides these, there is not much wheat or pulse, which would surprise a native of northern China.

July 25th. To-day a sea clam was brought, (doubtless a kind of *chama*) measuring two feet across and five feet around, which is known here as the *little tiled house* (瓦屋子) from the remarkable unevennesses of the shell, like a tiled roof. The natives use them for washing utensils and for sockets for door pivots; one is in a temple measuring five feet long. The taste of this mollusk is not so good as the small clams; in fact, of all sea products except the sturgeon and salmon, one may say that the larger it is, the poorer is its taste. There is a sort of spiral shell here (a *strombus* probably) measuring some feet around it, but its flavor cannot be compared with the small black whelks found near Peking. The chief minister sent us some pots of the Hibiscus to-day, red, white, double and single. Flowers open out here all the year round, owing to the warm climate. I was much touched by this kindness, and detained his messengers to take a glass. There is much confusion about the names of flowers and trees, of which there are many. One flower-pot was sent us containing the *shwui wang hwa* 水翁花 which I saw was the *ma lan hwa* 馬蘭花 a species of Iris, this makes much confusion in recognizing the names, and these people do not know the old names given in [Chinese] books. For instance the *lo han sung* 羅漢松 (abies) is here known as the *kien muh* 樫木; the *tung ts'ing* 冬青 (Levisticum) is called the *fuh muh* 福木 or happy tree. It is much to be regretted that these errors have been perpetrated, and that the books upon flowers do not carefully distinguish the names.

July 30th. This morning the offerings of silvered paper and silks to be burned before the royal tablets, with His Majesty's sacrificial announcement, were all placed in a movable shrine to carry to the ancestral temple to be presented. We went by the village of Po-dzung, and the Prince met us at the bridge, kneeled, and led the way into the temple. As the yellow prayer burned, a yellowish column rose to the height of 200 feet, and spread out like a parachute with fringed edges; every one cried out, A happy omen! We examined this temple carefully. The tablets are set up in two places in the hall, sixteen on the left hand and fifteen on the right; each one is called *shin chu* 神主 divine (or deified) lord, and known by his own name (*i.e.* they have no temple name given after death, as is the custom in China) except four who were the most renowned and are named by their posthumous titles. There are books for the names of the royal princesses and relatives of the sovereigns. On our return, as we were leaving, the chamberlain kneeled before us to express the deep obligation of the Prince for this favor. The officers and people of the land are all delighted, and reverently look up to His Majesty for this

exhibition of his filial duty towards their ancient kings undeterred by the remoteness of the region thus honored. This secluded country and its people, though they are to be regarded as untaught foreigners, are universally deeply sensible of the honor and glory now bestowed on their former kings. To-day the whole population came out to see, covering the hills and plains, the men kneeling by the wayside and the women looking from afar off; there were also many curtains put up behind which I was told were the families of the high officials. The women all tattoo the back of the hand and knuckles in figures like plum petals, some of them the whole hand, regarding it as ornamental. I have read that the Li-mu [in Hainan?] tattoo their girls at fourteen on the cheeks in fine lines, which they call embroidering the face. This custom of the Lewchewans is of the same kind. The women here do not wear ear-rings nor use cosmetics, and have no pearls or jade in the headdress. They carry their things in baskets on the head, and stand with them thus as they sell. The population is not under many myriads and daily increases.

The following list of Lewchean kings who have received investiture by the hands of the Chinese envoys, Li obtained from the state records; he gives with it the names and residence of each of his predecessors, principals and secondaries.

In A.D. 1373, 5th year of Hungwu, Zaito 察度 was crowned.

1405, 2nd year of Yungloh, Boning 武寧

1425, 1st year of Hunghi, Siopash 尙巴志, who commenced the present reigning family.

1443, 7th year of Ching-tung, Siocho 尙忠

1449, 13th year of Ching-tung, Siosuta 尙思達

1451, 2nd year of Kingtai, Siokiofo 尙金福

1456, 6th year of Kingtai, Siotaku 尙泰久

1464, 6th year of Tienshun, Sioto 尙德

1471, 6th year of Chinghwa, Sioyo 尙圓

1478, 13th year of Chinghwa, Siochiu 尙眞

1529, 7th year of Kiatsing, Siochin 尙清

1563, 41st year of Kiatsing, Sioyo 尙元

1577, 4th year of Wanlih, Sioyéi 尙永

1602, 29th year of Wanlih, Sionéi 尙寧

1628, 1st year of Tsungching, Siofung 尙豐

1664, 2nd year of Kanghi, Siochio 尙質

1683, 21st year of Kanghi, Siochéi 尙貞

1720, 58th year of Kanghi, Siokéi 尙敬

1757, 21st year of Kienlung, Siomo 尙穆

This series of rulers differs somewhat from the names given in the former article on Lewchew (pp. 48-86), but there are probably

some omissions in it, as circumstances were not always favorable for the emperors to send envoys, or the Lewchewans to dispatch their agents to Peking. However it shows a continuous successions of envoys for five centuries, and combined with a degree of respect and forbearance from one state to the other, altogether unique in the history of mankind, and creditable to both parties.

August 1st. A great many hermit crabs 寄生螺 *(Pagurus)* have come out in the yard since the rain, different in size and appearance, but all carrying shells on their backs. They are like snails, but have the claws of the crab; these are eight in number, four large and four small, and it walks with the large ones; the claws differ in size, and the small one is kept drawn in, while the food is picked up with the other; if you strike it, both are retracted and the opening closed. The thing is a crab with the nature of a snail. It is also called the *whitish tumble-dung*, and one author says "It has a crab's belly, but how shall it be classified? It seems to be a crab turning into a snail." When my servants put some into a dish to examine them, and tried to ascertain its power by pulling one out of the shell, it died almost immediately, showing that its life depends on its shell being preserved. The nature of things cannot be fathomed! It is hard for the mind to understand them!

August 3rd. The chief envoy Kiai-shan came across another kind of crab a while ago, which he called sand crab, *sha kiai* 沙蟹; it has a broad thin body, and claws as large as the body, &c.; the carapace is small and gouged out in front, into which the claws fit so exactly that no fissure can be seen; the eight legs are small, and the sexes cannot be distinguished; when it sees a man it thrusts out its two eyes and spurts water an inch or more, as if it was ready for a fight. He put it into water, and after ten days it ate nothing, nor did it die. The natives have no name for it, and I have written a stanza to commemorate it.

These observations show the character of our traveler, to whom the change from Peking to Lewchew was like going into a new world, and he seems to have used his opportunities diligently. The crab he here describes is probably allied to the Eriphia.

He also very fully describes the sea-horse, *hai-ma* 海馬, *(Hippocampus)*, a dried specimen of which was brought to him; it is regarded as a delicacy, and always presented to the king; he regrets much he could not see a living one. The festivals and temples, the scenery, the manufactures, the official visits, and the local customs, all come under his notice, and a pic-nic is detailed with great gusto, where everybody got drunk. On one occasion the prince sent him some *rice fat* 米肌, which resembled cream

in its consistency, a little sourish, and known also as *fermented rice* 釀米; it is made by women who chew rice and spit into a vessel where the mixture is left till ready; the natives are fond of it. No yeast is employed in making it. At another time, he gets a specimen of the *Echinus* or sea-urchin (*hai-tan* 海膽 sea-gall) which is a new marvel. It is round like a ball and covered with spines like a hedgehog, has neither head nor tail, and can roll and turn on every side in its progress; on the side is a small red squarish orifice, which is perhaps the mouth. The natives take off the skin, and beat the flesh to a jelly, putting it into small jars and salting it; they taste it before presenting it.

One night a heavy squall blew in all the paper windows and rocked the house so that he could not sleep; hearing a chirping in the walls he lighted a candle, and found multitudes of scorpions, which instantly scuttled off into their holes. As sleep was impossible, he and the rest of the company spent the rest of the night in singing and writing verses.

August 4th. To-day I asked Yang about the officers, laws and literati of his country. He tells me that all the rulers and dignities in Lewchew are hereditary; those of the rank of cabinet ministers receive revenues from lands, and persons are promoted according to their merit; an officer who goes to China gets one step, an envoy to Peking gets the highest step. There are no literary examinations, and each class, scholars, husbandmen, mechanics, and traders, keeps in its own standing from father to son. There are seven chief families in Shudi, who only intermarry with the king and each other; the high rulers, *fah sz'* 法司, who wear purple caps mostly come from these seven families; their cadets enter the palace as pages after the age of fourteen, for the purpose of gradually becoming officials. The officers of the revenue, *ku-sz' kwan* 庫司官, are promoted to be *hiah-tah-li,* 曷闥理官, a designation which appears in another part to denote a court chamberlain; members of the various departments, *'rh-muh kwan* 耳目官, up to the high rulers, are finally promoted to be called Royal Aulic Councillors, *tsin-fang* 親方. All get a stipend from the revenue officers upward, and the honor goes to the eldest son or grandson. Interpreters, *tung shi* 通事, come from the town of Kumi; they can attain to wear a purple cap and gold pin, but cannot become a high ruler, 法司, though just now Tsai Wăn, in consequence of his remarkable abilities has been made one, and his son has moved up to Shudi and is numbered among the seven noble families. His predecessor *Ching Kiung* also was promoted to be a high ruler in consequence of his merit, but he was carried off by the Japanese, and died among them because he would not submit. The students at Kumi are

divided into those who speak and those who write Chinese; after ten years' study they are called *siu-ts'ai* and get a stone (Japanese *koku*) of rice as stipend. They shave at fifteen, then pay their homage to Confucius and are admitted to an audience, when the king records their names and they receive three stone of rice. As they grow up they become interpreters, then chief interpreters, *tu tung-shi* 都通事, interpreter-councillors *tung-i ta-fu* 通議大夫, middle councillors *chung-i ta-fu* 中議大夫, and lastly their highest grade, which is to be a purple cap, gold pin officer. These are decendants of the thirty-six families who came here in the Ming dynasty. The people of Napa are traders, some of them are wealthy and attain dignity. Those of the Napa officials who can talk Chinese are made local officers; those in the outer islands are only headmen, *yu-chang* 酉長, and the king places there a kind of resident, a member of his family to judge and settle their matters.

August 6th. I asked one of the officials to-day, how it was that while they had Budhist priests in the country, they had no nuns, and though they had knowledge of the three sects, they only paid reverence to Budha; why did they not respect priests and necromancers? He replied, "Although there are no Rationalists with us, we still reverence the gods and genii." Why do you do that? I enquired. He told me that once in olden time, a man named Minglitsz', a farmer in poor circumstances and of irreproachable character, but without any family, had a living well of delicious water near his house. He went one day to draw some, and when at a distance saw a bright light in the well; on drawing near to see what it was, he beheld a woman diving and washing in the water, who had her clothes on a pine tree. Being displeased at her shameless ways, and at the well being fouled, he secretly carried off her dress. The garments were quite unlike Lewchewan in their style, and of a ruddy sunset color, which excited his surprise, so that he cautiously came back to see what change would come about. The woman finishing her bath, cried out in great anger, saying, "What thief has been here in broad day? Bring back my clothes quick!" Minglitsz' hearing her say her name, was still more embarrassed, and answered nothing. She then protected her person with her towel, and threw herself on the ground before him, when he saw that she differed in form from other women, but her color was the same. He began to scold, "This pine and this well are both mine, why do you come and foul my water?" She bowing low sat down and replied, "You are altogether in error. This pine and well were made by the Creator, 造化所生, for no one's private use; how can you take them for your own things?"

The man's heart was excited when he first saw her, but her words were so intelligent, that he improved the opportunity to coax her to him,

and said, "All nature comes forth through the effect of the dual powers, and men and women join as husband and wife, they are united, but husband and wife are not always so. You are a woman and I am a man, but I shall be exceedingly mortified if we stay longer in this position, as it is very improper." She angrily replied, "I candidly tell you I am not a child of dust, I am a fairy, and as I took a fancy to this well, I come here to bathe; what have I to do with the married relations of people of the world? But as I cannot get away without my clothes, do not disgrace me."

Minglitsz' rejoined, "The rain falls from heaven, and then becomes water of earth; so you, having come down, are now to be classed among men, though you are a fairy. You can go yourself, but you can't have your clothes."

She then spoke up, "This must then probably be a neat plan of your's, Sir. The gods, having seen your irreproachable character, wish to magnify your family, and as you are too poor to procure a wife, they have tied the silken cord between you and me, and I am here therefore to raise up a son, and it would be improper for me to go away."

The man was overjoyed, but fearing lest she might get off at any rate, got some clothes for her, and they became husband and wife. People did not suspect anything at first, but gradually their surprise began to arise. She had a daughter named *Chinkoh* or True Heron, and a son, *Kwei-nine* or Tortoise Year; when the first was nine years old, the mother's fate was fulfilled, and she wished to go. She dressed herself in the original garments while her son was asleep, but the child awoke and cried for her, which made her fear lest her affections would so enchain her she could not fly. She ascended the bough of a tree and the boy followed, weeping and wishing to go with her. She cried out to him, "You both have had merit in a former state, and will certainly become honored; you must obey your father and forget me." So saying, she glided off on a cloud and gradually disappeared.

The children cried bitterly, going off into the forest to search her, and sleeping there. The king, hearing of the incident, sent several times by his officers to seek them and learn the facts, but could not find the house; when one day two such children were met crying most plaintively. Inquiring who they were, the children told the officers and led them home, where it was seen that the fairy had gone. The father had gone to Shudi on a visit for three days, and on his way back met his children to his great wonder, sorrow and gladness being mingled. The officers led them to the king, who brought up the girl in the palace, and placed the boy where he could be taught, afterwards conferring on him an office and some land on his father. As soon as he had narrated this story, I grasped my pencil and made a record thereof.

Every one conversant with the Arabian Nights will remember the story of Hasan of El-Busrah (Lane's Translation, Vol. III, Chap. XXV, page 384) who caught the daughter of the king of the T'an by carrying off her dress of feathers as she was bathing; and when some years after she had flown away with their two children, of his following her to the land of Wak-wak, supposed to be Celebes, by Lane. A similar incident occurs in the romance of Seyf Zu-l-Yezen, Lane adds; and also quotes a French author who speaks of a similar story in German, and its existence in a Shetland legend, where the fairy's dress was seal-skin.

Our author is struck, as everybody is who visits Lewchew, with the beautifully colored parrot-fishes *(Scarus)* which he wisely declined to eat. The schools of flying fish, "like swarms of white birds," make him suspect that they are really aquatic swallows, rather than fish. The delicious plantains in the island draw out his praises, and he quotes their name of *han-lu* or sweet dew, with approbation; there is a sort too from which the people make cloth, probably a variety of the kind in Luzon, from which pine-apple cloth is woven, and its existence in Lewchew indicates the tropical character of the climate. He remarks respecting the annual return of the swallows, how singular it is that they should know the year when an intercalary month occurs and time reappearance accordingly; which deduction is probable because of a mistake made by him in the bird itself, as he adds that the Lewchewan sort does not build its nest in the eaves of houses.

August 25th. I inquired to-day about the ceremonies attending marriages, and my informant tells me they are mean and trivial. Most people merely send some saki, flesh, pearls and fine shells as betrothal presents. On the wedding-day a native sedan ornamented with silks is used, and accompanied by musicians, the man goes after his bride. The people do not reckon much on her trousseau; her parents accompany her to the door and then return home. There is no general feast, only the nearest relatives, a few in number, assemble to congratulate her, with some cups of wine. I asked if the old account given in the Sui dynasty (A. D. 600) was true, that the young people selected each other and made their own matches? He said it was so; and added, "I have heard that when the thirty-six families moved here (in the Ming dynasty) that the custom still existed, but after that date, the usage of go-betweens gradually prevailed, and the old custom died out. Our law now is that a married woman is put to death for adultery; how can we then bear with illicit intercourse?" I thus perceived what an influence these thirty-six families

from China had had in renovating this country, and how carefully its people maintain the rites since they came.

August 26th. To-day I asked another of the officers concerning funeral ceremonies. He says that when one of the common people dies, the neighbors all assemble to accompany the coffin to the grave, the nearest relatives weeping as they go; when it is interred all return. The equals of an officer and his acquaintances come together to his funeral, and return home as soon as the coffin leaves the house. Even at a councillor's funeral there is no feast, and generally a priest is employed to dot the ancestral tablet of an official.* On the tablet of a man is written *Yuen-shuh ta-shen ting* 圓寂大禪定, *i.e.* the deceased great [one, who is now] fixed in contemplation; and on a woman's, *Shen ting ni* 禪定尼 *i.e.* the nun who in contemplation is fixed; but the terms *h'ao* 考 and *pi* 妣 to denote one's deceased parents are not employed [as in China]. Lately official families have taken to writing the titles of the deceased on the tablet. I asked him, if the remark of one author that I had read was true that the Lewchewans made their coffins three feet long and cramped the corpse when it was shrouded. "The officials now make coffins five or six feet long, but the common people follow the old usage," said he. Thus it is that the teachings of propriety slowly penetrate the mind, and slowly do away with old customs, for the rustic and groveling do not alter their ways.

August 29th. I asked one of our visitors to-day about their soldiers and punishments. He replied, "This little country has no knowledge of soldiers. Our punishments are only three. A murderer is put to death; one who wounds another grievously is banished; for a lighter crime he is fined, and others are exposed publicly in the hot sun according to their demerit. No one has been executed among us for many years; but when a criminal is to be thus punished, we usually give him a knife and he performs *hara-hiri*." From this statement you will see that the punishments in Lewchew have become effete (the phrase intimates as in the halcyon days of Yao and Shun).

The statements here given correspond with what Capt. Basil Hall reported fifteen years after this date of the peaceable character of these islanders; and subsequent visitors have never seen anything more formidable than bows and arrows. It is probable that the Japanese early disarmed the population, for the existence of several stone forts, and one or two strong castles like Naga-gusco

* This refers to the ceremony of adding a dot to the character 王, which makes it 主 *lord*, and marks the moment when the spirit takes up its abode in the ancestral tablet.

described in Commodore Perry's report prove that the warlike passions stimulated the erection of such solid structures. In 1855, one of the men belonging to the U.S. sloop *Lexington* was killed near Napa in a quarrel, having probably been stunned as he fell from a blow at the water's edge, and thus drowned. The Lewchewan authorities had a long trial of the case, and gave up a man to the Commodore to be executed; he repreived him from death, and ordered them to banish him for life to the Madjico-sima Islands, their usual place for deporting criminals, which they agreed to do. During a residence of eight years at Napa, the English missionary Dr. Bettelheim never heard of a public execution, but he suspected the authorities of starving an inquirer of Christianity to death, in order to get him out of the way.

The small stature of the people and flowing beards of the old men, perplex Li's ideas about the physical traits of man; while his chaplain depreciates the whole race because they wear grass sandals and have short stockings with a big toe. The entire absence of coin leads Li to ask his friends how they manage to trade, as he goes through the market where sweet potatoes, fish, salt, saki, coarse wooden and earthen utensils, plantains, grasscloth and much rubbish, were exposed for sale,—the first article about as much as all the others put together. They tell him "all traffic is done by barter; and that the Japanese money of the reign *Kúnyéi* 寬永 which he had heard the Lewchewans used, had been all withdrawn lest the Chinese should buy it up, and carry it away on account of its purity. There had been some native copper money recently made as a substitute, however, round like a goose's eye with a hole to run the pieces on; they were strung in rows three inches long and four rows were wrapped together, worth ten cash in all, and the character 鈐 written on the parcel to show that they were only for present use. As soon as the junks left this would all be called in and destroyed." During Commodore Perry's visit, all the coin paid for supplies went into the hands of the officials, who said that the gold and silver would mostly be used for hair-pins, and the cash sent back to China. No coins were ever seen in the market, and the poor natives preferred biscuit, pictures or colored cottons to money, which they told the American officers they could not keep if found on them.

Sept. 14th. Whenever I have gone abroad, I have always seen many sordid-looking women at the roadside making clothes most diligently. To-day I asked about them, and first learned fully from the attendants

how very indolent the men here are, and how the women toil. They use no beams to carry burdens, work at weaving and mending even in the markets, collect fuel, and bring water; they carry most things on their heads. Their dress has no buttons or girdle, and neither sex wear trowsers; the lappel is tucked over under the arm, and the dress is longer than the men's, doubled and very long, so that the wind never blows it open. Their head dress is pushed down so as to rest burdens on the crown, and let their hands be free to take care of the dress. They practice this from girlhood, and will walk steadily up hill with a hundred catties and drop nothing,—which is the most dextrous thing I have seen done in this land. They roll up the sleeves to the shoulder while at work and tie them behind. The hair is washed when dirty with the help of a clay, and they strip to the waists out of doors when doing these ablutions. They carry their children astride on the hip, thus keeping the dress close to the person.

Sept. 28th. One of the natives told me to-day that a *kiao* 蛟 or dragon had got out the previous night from the North Hill, but luckily had gone off to one of the distant islands without injuring any one. I asked him what harm would arise if it went into the sea? He replied, "There may be some yet. I have heard that in the ancient days of equity, a dreadful dragon went into the sea through a waterless valley; that year was a hard one for the people from drought; and a necromancer said that a girl and boy must be offered in sacrifice before the calamity would stop. The king said, How can I bear to sacrifice a tender child? If there's no other remedy, I wish you would offer me up. His officers replied. The sacrifice must be a child, by whom the people are to be saved. The king submitted, and issued a proclamation, saying, "If any boy or girl will offer themselves for the preservation of the country, I will give ten thousand pieces of gold to their families. At that time, there was a boy of twelve in a town, whose name was Sz'teh; his sister Chinkoh was fourteen; they had lost their father when infants, and the family was wretchedly poor; they helped their mother dutifully, and daily went out to get mulberries and other fruits for her support. One day the boy went to town and heard of the king's proclamation; on getting home he told his sister that he had a mind to offer himself to be sacrificed, and thus get the money for his mother. She said, It is your high privilege and duty to maintain the family ancestry. I am nothing but a girl and useless to my mother, so that the best thing will be for me to die. She was fixed in her design, and even tried to kill herself because Sz'teh opposed her. He therefore yielded and started to tell their mother, when she stopped him, saying Don't go! She will never consent. She therefore deceived her by telling her she intended the next day to go to the seaside to get some water and

boil out salt. The old woman replied. Last night I dreamed that I mounted a dragon and went on high; I feel so sad to-day that I wish you would not go. The girl rejoined, A dream is nothing but vanity; why do you believe it? and still more, when it augurs nothing evil? The next morning she and her brother slipped away, and parted in the wild with much weeping; she went straight to the magistrate and told him her intention, who took her to the necromancer to select a propitious day for the sacrifice. On the set day clouds enveloped the sky, leaving only an opening like a star for the dragon's eye, from whose mouth issued fire. Just as the magician had finished his prayer, and was about to offer her up, a clap of thunder was heard, the wind and rain rushed together, and an old man like the God of Longevity appeared, holding a sword in one hand and a pennon in the other, rushing and hallooing as he came up, and causing everybody to scatter in such a terror that they dared not look up. It by and by cleared up and the dragon disappeared. The magistrate hastened to tell this to the king, who was greatly moved at the intervention of the thunder and rain. He also reflected that as this filial sister and his brother had been thus thought of by heaven, even ten thousand pieces of gold were not enough recompence for them. He therefore took the girl for his son's wife, and married his daughter to her brother.

How strange! To throw away one's life for filial duty in this way is rare indeed, and still more, such a weak girl and tender lad. No wonder such virtue saved them!

The time of departure drew on, and the two commissioners having performed all the ceremonies of investiture to the youthful sovereign, think of looking after the condition of their vessels, which are to be refitted, recaulked, and made thoroughly ready. Our journalist goes about to all the temples, attends all the festivals, reads hundreds of compositions and letters sent to him, visits gardens and joins picnics, goes boating and assists at ceremonies, so that the time seems to pass quickly and profitably. He tells us that in the Sui dynasty (A.D. 580) the islands were first mentioned by Chu Kwan, who called them *Liu-kiu* 流虯 or the floating dragon from their shape; this name was soon changed to *Liu-kiu* 流求 as if the place was to be sought by the currents which drifted thither. In the Tang dynasty, people wrote about the *Liu kwei* 流鬼 or floating demons, who were said to live there, but the Yuen writers altered this name to *Liu kiu* 瑠求 the bead [which is] sought, and those in the Ming dynasty changed it to its present name of *Liu-kiu* 琉球 or the pendent ball. The name *Tuchala* 土噶喇 also puzzles him; he hears much of it and of

the *Pao tao* 寶島 or Precious Island, whence everything comes, and at last learns that Japan is meant by both names; the former however really designates Tanega sima, and the latter Kiusiu and the principality of Satzuma, rather than Japan.

The whole party went on board the 28th of November 1801, after many delays and consultations, and a north wind took the junks out of the roadstead directly on their course. On the 1st of December the fog was so thick as to alarm the crew lest they should go ashore, but the next day they raised the Pih-ki Islands on the Fuhkien coast, near which they saw scores of small boats at anchor. These they concluded were boats sent out to escort them, but on nearing the fleet, they were startled to find that they had got into a nest of pirates. Li was equal to the emergency, if we take his account of the encounter, of which he gives the particulars.

I said, "Our vessels are in for it. Call out the guard without any noise, and let all get their breakfast; put the arms and spears in order; I will get my breakfast." The captain of the guard came up to say that the pirates were making sail. I and Kiai-shan dressed ourselves and went out to pray to Tien-hau. I made those who were seasick or afraid, and the invalids, all go below; and then went on the poop, where I gave orders to all, "The pirates are many, we are few, but you must not diminish your courage. Their vessels are small, ours are large; they hoist sail one after the other, and the best sailors reach us first, for the whole fleet cannot get here at once, so that we can take them one by one. When we meet, it is useless for you to be frightened, for you must risk your lives anyway, and preserve them in the midst of death; let to-day be the time when I and you all sell our lives dearly, and we will live or die together."

The guard bowed and bravely answered, "Your orders are heard." I ordered them, "before the pirates get within 300 paces, do not fire the guns; when within 80 paces, fire the matchlocks; and at 40 paces shoot the arrows; and if they come to close quarters, spear them. He who kills a pirate shall be well rewarded, but the skulkers shall be tried by court-martial." I then told the captain to kill a sheep before them as a sign of their own fate if recreant, and each man took his station.

Soon the pirates drew nigh, sixteen junks in all, straining and cheering as they came on. The head one was within 300 paces, when I waved a flag, and Capt. Wu fired the side guns one after the other, killing four fellows, and knocking the leader overboard. This boat had hardly got within 80 paces, when our matchlock men fired, killing six of the men, and it turned about. The next behind came up, and our big guns again

fired, killing five on board; a little nearer, and we hit it again, finishing four more, when it retired. Three of the pirates were coming up astern, when I had the cannon quietly moved nearer the rudder on the starboard side, and gave them a round, killing twelve men and setting their foresail on fire. All then turned and fled. Two larger junks were then rapidly coming near with a fair wind, yelling and hallooing, when I cried out, "Those are the piratical chiefs. Quietly tell the helmsman to bring the vessel round a little; and when the guns are in line, fire all at once." We hit them, and after the noise and smoke had cleared, the whole piratical fleet was seen retreating.

None of our men were wounded, and we were glad to escape the danger. It was evening and as the wind was light, I was afraid the pirates might come upon us by night, I silently prayed to Tien-hau for a wind. Within an hour the wind came out strong from the north, so that we could not keep up with the waves. I was so tired, that I wanted to sleep, but was deterred by the thought of the danger just passed through. "Why then," thought I, "should I dread it over again? I have prayed for a wind and the wind has come; I can throw off anxiety, and not let it reduce my strength." So I threw off my clothes, and was soon sound asleep, never hearing or seeing the least thing.

The whole party reached Fuhchau on the 5th of December, 1801, where all returned thanks to Tien-hau, and had a great feast in her honor, the envoys furnishing most of the good cheer. This worship of the goddess is so general along the southern coasts among seafaring men, that it almost supersedes the regard to other deities, and her protection is implored by them for everything, both on land and water. Our traveller ends his journal with the return to Fuhchau, and his condolence with his chief, who there heard of his mother's death, an event that occurred about four months previously.

ARTICLE XI.

TRANSLATION OF THE INSCRIPTION UPON A STONE TABLET COMMEMMORATING THE REPAIRS UPON THE CH'ENG HWANG MIAU OR TEMPLE OF THE TUTELARY DEITY OF THE CITY.*

In the handwriting of Chên Pan-kiau, Magistrate of the city and district at Wei Hien, (District of Wei,) in the department of Lai-chôu, in the Province of Shantung. A. D. 1752.

By D. B. McCARTEE, A.M., M.D.

A SINGLE horn, four feet, and a hairy *covering* constitute *the distinguishing marks of* a Ki-lin;[1] two wings, two feet, and elegantly variegated *plumage, those of* a Fung;[2] a want of feet, and a tortuous mode of progression are what *characterise* a Serpent; and startling lightnings, roaring winds, and thundering clouds[3] above and beneath, with legs for which he has no use,—the Dragon. Each has its separate name; each its distinct individuality; and they cannot be confounded. So what we gaze upward and behold of an azure appearance *is* heaven; what we look down and come in contact with, massive, (or Clod like,) *is* Earth. Between *Heaven and Earth, endowed with* ears, eyes, mouth, nostrils, arms and legs, having the ability to speak and to clothe himself, ceremonious and capable of observing the proprieties, *is* Man. But does this imply that the Azure Heaven is also a personal being with ears, eyes, and nostrils.

* Read before the Society on 11th April, 1871.

1 The Ki-lin is a fabulous animal who is said to be appear when a sage is about to be born. v. Morrison's Dictionary *sub voce*. The Ki-lin which appeared before the birth of Confucius, is said to have resembled "a small cow with one horn, and was *covered with scales* like a Dragon." v. Lëë Kwo Chi, Book LXXVIII, quoted in Dr. Legge's Chinese Classics, vol. 1, p. 59.

2 Fung or phœnix. v. "Annals of the Bamboo Books" in Dr. Legge's Chinese Classics, vol. III, p. 108.

The Ki-lin, Fung, Serpent, and Dragon, are the four spiritual things 四靈物; Heaven, Earth, and Man are the three great Powers 三才.

3 *Literally* "cloudy thunders."

Since the time of the Duke of Chôu,[4] it has been styled the Supreme Ruler,[5] and the vulgar have also called it the Gemmeous Emperor,[6] and have thereupon given it ears, eyes, mouth, nostrils, arms and legs, a crown with pendant ornaments, a jadestone sceptre, and a personal existence. They have delineated it in gold, modelled it in clay, carved it out of wood, and sculptured it out of jadestone. They have given it a retinue of youthful officers, and fierce generals as companions; and the people of the Empire following *en masse* the footsteps *of their predecessors* have also personified it. An awe inspiring influence *is felt* above, beneath, and on the right and left.[7]

Now as to cities of every rank, each has its *Ch'êng* (or *wall,*) like an unbroken ring, with serrated battlements, and outside of the *wall,* its *hwang* (or ditch) encircling it with its restless flow. But why again (I ask) must they clothe the Ch'êng-hwang in dark coloured crape, and give it a sceptre and a personality? *So that* among all the magnates and multitudes *within* the Four Seas, there are none who do not make offerings as to a personal being; investing it with the control of happiness and misery, and the power of life and death; giving it as a retinue, the Ten Kings of Hades, arranged in order in the two wings of its temple; equipping it also with the Flower Sabre, and the Tree Sword, the Brazen Serpent, and the Iron Dog, the Black Cloud, and the Thundering Drums[8] to make it fear inspiring; and the people *en masse* have concurred in fearing it. Not merely do the people fear it. I too fear it; *for* whenever I reach the place between the front and rear temple buildings, the dimly lighted windows make my hair to stand on end, and my frame to shudder as though there were a demon[9] there. Hence we see that the method of making use of *Shên*[10] in instructing *the people,* instituted by the rulers of anti-

4 Chôu Kung, son of Wên Wâng, the "Literary King," and elder brother of Wu Wâng, the "Martial King;" a very renowned dignitary who is said to have lived about the year B. C. 1130.

5 Shang Ti.

6 Yuh Hwâng, literally "Jadestone Emperor;" a designation of one of the gods of the Tau sect, the professed followers of the philosopher Lau Tsz'.

7 See the "Doctrine of the Mean" (Chung Yung,) Dr. Legge's Chinese Classics, vol. I, pp. 161-162.

8 These accompaniments are taken from the descriptions of the *hells* in popular form of the Buddhist mythology.

9 Or *a ghost.*

10 Or "on the Shên principle." Shên 神 "a divinity, the soul of a living person."

quity was not a useless one. Tsz' Ch'an says—"These things are what make people pay court to them;" and unless the ignorant populace pay court *to the gods*, they cannot be relied upon.

The Ch'êng Hwang temple of the district city of Wei, is situated on the western side of the District Magistrate's Office. In the 14th year of Cheng Yih, the heavy rain injured both wings of the temple, and the eastern wing more especially. The regret that the sight caused, gave rise to a proposition to the gentry to repair the damages. They unanimously assented; and new wings have been erected, three cubits higher than the former ones. The main and rear buildings, the images, drum, bell, flutes, and organs, are both substantial and brilliant. Moreover outside of the principal gate of the temple, a stage for theatrical performances has been erected, at an expense of several thousand ounces of silver. Was not this a work of supererogation? Can it be that there are SHÊN who delight in theatrical performances? Of course not. The inscription of the Tsao-wo tablet says—"In the quiet retirement of a chaste and virtuous life, she was a skillful instrumental performer, and could sing with ease the Po-so Song to the delight of the SHÊN." So it appears that the ancients frequently welcomed the SHÊN with songs and dances. The Book of Odes says,—"With lyres and harps, and strokes of the drum, welcome the Lord of the Fields." Now whoever heard that there really is a Lord of the Fields, or that he really delights in lyres and harps? It is simply because people wish to give expression to their feelings of gratitude, that they are led to pay their court to the great divinities (tá shên) in these multiplied acts of love and worship.

Now as to the Ch'êng Hwang,—since it is sacrified to as though it had a personal existence, why should not such things as songs and dances be employed to give it enjoyment?

Moreover Theatrical performers, who instruct the people by bringing before them the occurrences of ancient times, representing them in such a lifelike manner as to call forth in their audiences magnanimous feelings, joyful emotions, or sorrowful expressions, are benefactors of humanity in no small degree. Only let low vulgar and clandestine affairs and such as relate to the grosser passions be strictly prohibited, then the erection of the theatrical stage will not prove a matter of supererogation.

To sum up; Fu-hi, Shên-nung, Hwang-ti, Yau, Shun, Yü, T'ang, Wên-wang, Wu-wang, Chôu-kung, and Confucius, having

been men (or having had a personal existence) *before they* were deified, it is proper to sacrifice to them as those who have a personal existence; but Heaven, Earth, the Sun, Moon, Wind, Thunder, the Hills and Streams, Rivers and Mountains, the Shie tsie (*literally* "soil and grain") the Ch'êng Hwang, ("wall and moat,") the Corners of the House, the Well, and the Kitchen Furnace, although deified have no personal existence,[11] and should not be sacrificed to as though they had. Yet from ancient times even the sages have all sacrificed to them as though they had a personal existence.

Now as to the shorthorned reluctant ox, the flavor of the sacrificial broth and dark wine, the unadorned simplicity of the chariot and meats, the elegant adornment of the vessels and baskets *used at the sacrifices*, how can it be that the deities of Heaven and Earth, eat, drink, drive or guide them? The colors, the odors, and the flavors of Heaven cannot be imitated. *These ceremonies are only* accommodated to the reverential desire of the human heart to give expression to their extreme veneration. Looking on it in this light, the erection of a commemorative tablet in the Ch'êng Hwang temple is not a matter which concerns a single precinct or a single city merely, but one which is directly connected with the ceremonial etiquette of remote antiquity.

Those who undertook the business, viz. the subprefect Ch'êng Shang-tsz', the literati (or baccalaureates) Tien Ting-ling, T'an Sin, Kuh Hiau-chang, the honorary batchelor Ch'êng Tse, together with Wang K-chi, T'an Hung, and many others having contributed funds to defray the expenses amounting to a very considerable sum, and proposing at a future day to polish and engrave a tablet which will endure for an infinite period, *I their* humble *servant* dared not grudge *a contribution of* pen and ink.

Composed and written in the 17th year of Kienlung, being the 9th year of the current cycle, in the 5th moon by Chên Sie, (whose literary epithet is) Pan-kiau, District Magistrate of Wei.

11 Owing to the dearth of abstract terms in Chinese the word 人 *jên*, *man*, is used to denote a person, and to personify or ascribe personal existence to any thing is said to *jên* it.

[NOTE.—Mr. Chên, whose literary epithet was Pan-kiau, belonged to the materialistic school of Chu-hi, (who flourished about A. D. 1150,) and acquired a high reputation as a Calligraphist,

a scholar, and a wit. His "Remains," consisting of Poems, Drawings, and Epistolatory correspondance, have passed through many editions.

The Ch'êng Hwang is a deity very extensively had in reverence among all classes of Chinese. There is a Ch'êng Hwang for each *fu*, (o[illegible],) and another for each *hien* [illegible] in China. The office of [illegible] deceased officers who have [illegible] by the benefits th[illegible] life, upon the cities whose tutelary deities they are appointed to be. They are [illegible] *invisible* world, the same rank as that held by the Chi-fu and Chi-hien [illegible] respectively, in the visible world; and like them are subject to the rul[illegible] years tenure of office in one place. They receive their appointment fron[illegible] *Pontifex maximus*, of the Tau sect, who resides in Nan-chang Fu, in the province of Kiang-si.

Disputed accounts are frequently carried to the temple of Ch'eng Hwang, and calculated upon an *abacus* which hangs ordinarily in front of his shrine. The district magistrate sometimes goes to this temple to pay his respects and to ask counsel in difficult cases; and sometimes adjourns his court to the same place, in order to give solemnity to the trial, and to intimidate the witnesses to speak the truth.

A subordinate deity in this temple is called the Suh pau Sz' or "Administrator of Speedy Recompense" and to cut off a cock's head and fasten it with a paper on which the oath is written, to the wall in front of this idol, and to step over the brazier in front of the shrine of the Ch'êng [illegible] solemn methods of taking an oath that I know of among the Chinese; [illegible] under such circumstances, it is very generally believed, will be visited [illegible] nent.]

ARTICLE XII.

RETROSPECT OF EVENTS IN CHINA AND JAPAN DURING THE YEARS 1869 AND 1870.

By J. M. CANNY, Esq.

1869



N looking back over the history of 1869, one is struck with the fact that but few events of any special importance seem to have occurred in the internal politics of the Chinese empire.

An even, quiet flow of the national history with but few interruptions and few disturbances is the main characteristic of the period. The Nienfei rebellion had been finally suppressed in the previous year; the Mahomedan insurgents were pushed backwards into Kansuh. In the South and South-west only one province (Yunan) resisted the Imperial Authority and that province had been for a long time practically dissevered from the empire. For the first time for many years the country was at peace; and an opportunity was offered to the Government of healing the wounds which protracted civil war had inflicted on the people. But neither the central nor provincial authorities seemed fully alive to the occasion. Things were allowed to drift into the old groove and shape themselves as best they might. No effort was made to give them direction or check the corruption and abuses which had been fostered by protracted civil war. Officials of all classes from the highest to the lowest continued to pursue their ways with an undeviating adherence to their own interests, and a painful indifference to the wants of those whom they governed.

The suppression of the Nienfei rebellion though highly beneficial to the country, could not, in the natural course of things, prove otherwise than dangerous to foreign relations. Many of the restless spirits who had previously been occupied with the insurrection found themselves suddenly out of employment and in

want of new fields for their energies. The authorities too felt their hands empty. Both at Peking and the provincial capitals unaccustomed quiet was felt; and the ruling classes had much leisure at their disposal for the sore question of foreign intercourse.

The consequence was, that much uneasiness begun to be felt in different parts of the country, and rumours hostile to foreigners were disseminated amongst the populace. Various outrages and attacks on foreigners had taken place in 1868. These were followed by further disturbances in 1869. Missionaries, as being the advanced guard of the position of Western nations in China, and living for the most part in the interior, isolated from their countrymen and without any adequate means of protection, were in almost all cases the victims. Had foreign merchants been similarly scattered over the country they would in all probability have had a similar fate to encounter. In the only part of the empire in which trade is carried on to any extent in the interior by foreigners, that is, in Formosa, there was no distinction whatever drawn between the merchant and the missionary; and both parties seem to have been met with an equally hostile feeling.

Towards the close of 1868 an unprovoked attack had been made by some villagers near Swatow on a boat's crew from H. M. gunboat *Cockchafer;* and in the affray that ensued eleven men from the gunboat were wounded, while the villagers lost several killed and from 30 to 40 more or less injured.

For this outrage an apology was demanded from the authorities at Swatow. Guarantees against the repetition of similar attacks in the future were also insisted upon. But the power of the local officials was feeble; and the turbulent villagers instead of expressing regret for their wanton attack insisted on a money compensation for the lives lost. Seeing the hopelessness of pressing the matter to any satisfactory issue before the mandarins, the senior naval officer took the case into his own hands; and towards the end of January 1869 a squadron of five of Her Majesty's vessels was assembled at Swatow for the purpose of bringing the villagers to reason.

A party of 450 men was landed from the fleet on the 29th of the month. The village braves however made but a poor attempt of resistance. At first they stood their ground and tried to defend their fortified villages, but after a little time they gave way, and then their flight became a perfect stampede. Two of the villages were taken possession of and burned to the ground. No further

punishment was inflicted; and the loss which the villagers suffered was not very serious. The casualties amongst the landing party were nil.

Occurrences of this sort are no doubt always to be deplored; but in a country like China they are sometimes inevitable. As a writer in the *N. C. Herald* justly remarks:—Had the attack on an armed boat's crew gone unpunished, no foreigners would have been safe in the neighbourhood of Swatow and the river to Chochao would have been still virtually closed.

Almost on the heels of this affair at Swatow came a series of disturbances in other parts of the Empire. At Sharp Peak Island near Foochow there was a slight collision between some men from H. M. ship *Janus* and a mob who were engaged in pulling down the Protestant Mission House. Tungchow in Shantung was also made the scene of demonstrations hostile to the missionaries settled there. In Szechuen matters assumed a still more serious aspect; and in the month of January an organized attack was made on the Christian community of the city of Yuyang, in which several native converts were killed and a French priest Père Bigaud shared their fate. Later on in the year the house of the China Inland Mission at Nganking-foo in Nganhwei was broken into and partially destroyed. Fortunately none of the inmates were seriously injured, although Mrs. Williamson, wife of one of the missionaries who had two children in her charge was very roughly treated.

It was evident to most impartial observers who viewed those occurrences not as isolated facts, but as a series of events which showed the bent and drift of the national life that there was an element of danger at work amongst the people which looked anything but promising for peaceful relations with foreigners. Viewed separately, each on its own merits, these disturbances did not look very formidable. A captious critic might in fact explain away most of them, and perhaps give a reassuring color in many instances to the facts of the case. But it was not easy to misapprehend the broad, general meaning of these antiforeign demonstrations. It seemed inevitable that they should lead to trouble of a serious nature. They were too widely spread and too systematic to be barren of results. And it was felt by many of the foreign residents at the treaty ports that unless they were energetically checked the consequence would certainly be injurious to friendly intercourse between China and the Western Powers

In her relations with her immediate neighbours such as Corea, Japan, Siam, &c., China had but little to add to her history in the year 1869. Between Siam and Pekin there had been no intercourse for many years. The connection between the two coutries had never been very close, and merely consisted in the despatch of an embassy from Bankok at uncertain and irregular intervals. Even this intercourse was interrupted by the Taiping Rebellion; and it was only in 1869 that the late King of Siam conceived the idea of despatching a fresh mission to the Chinese capital. As usual however both the central and provincial authorities could not lose an opportunity of asserting their old claim to Universal Empire; and when the Siamese embassy arrived on the coast of China they were received by the Vice-roy of Fuhkien and despatched northwards as tribute bearers from the feudal principality of Siam. It is said that the Siamese authorities were much offended by this treatment of their representatives, and formally protested against the assumption of Suzereinty claimed by the Emperor of China.

Amongst the few questions of internal reform which attracted the attention of the Chinese Government in 1869 was that of the cutivation of native opium. In some of the Western provinces the culture of the poppy was found so profitable that it largely superseded both the cereal and vegetable crops throughout an extensive area, and serious fears were entertained of a diminished food supply. In a country like China where the means of communication between neighbouring districts are in such a backward state apprehensions of this nature assume an importance which they would not possess elsewhere. An Imperial Edict was consequently issued forbidding under heavy penalties the cultivation of the poppy; but like most Imperial Edicts of late years it was hardly ever intended to be enforced even by those who had most earnestly prayed for it, and was merely used as a weapon to exact further squeezes from the cultivators throughout the country. It was a good deal talked about at first, but the cultivation of the forbidden plant went on much as usual. After a few months the Edict became practically inoperative.

Considering their experience of the annual floods on the Yangtze one would naturally expect that an earnest effort would be made by the officials and people living along banks of the river to protect the country against the recurrence of such calamities, which from time to time within recent years have caused widespread distress and sufferings.. But year follows year with the

same undeviating result. In the summer time the river rises—overflows its banks, and the consequence is, that an immense amount of property is destroyed and many lives lost. The year 1869 was no exception to the usual course of things. On the contrary the river rose exceptionally high in July, and the damage done was correspondingly great. In the neighbourhood of Kiukiang the losses sustained were very heavy. They were also said to be very serious much higher up the river towards the borders of Szechuen.

In their diplomatic relations with Western nations the Chinese had but few matters of importance to transact during the year under review. In September a Treaty of Commerce was concluded with Austria; in October the new Convention between Great Britain and China was signed at Pekin by H. M.'s Minister Sir Rutherford Alcock; and in November the Burlingame Supplementary Treaty with the Government of the United States was ratified.

Of these various measures, however, none excited so much discussion, or was of such deep interest to the foreign community in China as Sir Rutherford Alcock's convention. No sooner were the details of this instrument made public than they were earnestly canvassed all over the Coast, and the result was, an almost unanimous verdict of condemnation from the mercantile community. When the particulars became known at home there was an equally strong feeling of opposition. The most determined opponents of the measure were those who had spent a great part of their lives in China and had still large pending interests there. Of course there were a few dissentients both here and in England; but these were either connected with the Legation at Pekin or consisted for the most part of individuals who had but comparatively small interests at stake and but a limited experience of the country and its institutions.

The power of the opposition made itself very strongly felt in England after a short time. Pressure was brought to bear on Her Majesty's Government from the large manufacturing towns in the north and elsewhere; and the result was, that it became known in the spring of 1870 that the convention would not be ratified by Great Britain. This resolution was formally announced to the Chinese Government in the summer of the same year.

Another subject which created some little interest at the time, and perhaps a shade of annoyance, was the reception or rather

non-reception accorded to the Duke of Edinburgh during his visit to Pekin in the autumn of the year. At Yeddo he had been received in a most cordial manner by the Mikado; and the event was made memorable by an unusual display of pomp and ceremony. On his arrival at Pekin however there was no official recognition of his rank whatever; and he was permitted to enter and leave the capital without a single officer of position being deputed to call on or show him attention. It was evident that the old ideas of Chinese exclusiveness and of the sanctity of the Imperial Presence were still rampant at Pekin. No foreign Prince could be received at the court unless in the position of either a postulant or dependent.

A singular instance of Chinese credulity occurred in Shanghai shortly after the opening of the new Church in August. It is chiefly worthy of record as showing the readiness with which the natives believe the most incredible stories about foreigners, and how easy it is to work them up at any moment to an intense pitch of excitement—as it is to soothe and calm them down afterwards if only the proper measures are taken for that purpose. A writer in the *North-China Herald* reviewing the events of 1869 says:—"A report got abroad that Black Devils were in the habit of issuing from the Church compound at night immolating passers by and depositing their bodies in the Church Vaults. Placards giving the most varied details were posted about the Settlement; but a Proclamation by the Taotai blaming the excitement and its originators eventually restored quiet. It was shrewdly suspected that some Indian watchmen employed in the Church Compound had given rise to the rumour by robbing some passers by."

It was further believed at the time that dead bodies were placed under the Church for the purpose of giving stability to the edifice. Such stories seem to us of course very preposterous; but it should not be forgotten that in a country like China they move popular feeling to its very depths. It was lucky indeed that the excitement in Shanghai passed off without any serious consequences. A spark might easily have led to a rather serious conflagration.

A notice of the events of 1869 would be incomplete without reference to the Yang-tze expedition which started for Szechuen in the early part of the year, and only returned to Shanghai in the Summer. Besides Mr. Consul Swinhoe who was deputed by Her Majesty's Minister at Pekin to report on the condition of the

western provinces and their capabilities for trade, two other delegates, Messrs. Michie and Francis, were appointed to represent the Chamber of Commerce of Shanghai; and the joint report of these gentlemen has proved exceedingly valuable and of great interest both from a political and commercial point of view. They were tolerably well received at the various places they visited, and they managed to collect a great mass of useful and reliable information in a very short period of time. Their report was published at the expense of the Chamber of Commerce and afterwards appeared in one of the Parliamentary Blue Books of Her Majesty's Government.

On casting our eyes from China to Japan, the most striking feature of the year under reiview is the quiet and peaceable manner in which the country settled itself down to complete the revolution which had abolished the tycoonate, and replaced the Mikado at the actual head of government after the lapse of some centuries. Nipon and the Southern islands were completely subject to the new Power by the close of 1868, and so thoroughly did the higher classes seem alive to the necessity of strengthening the government and accommodating themselves to the new situation that in the month of April they voluntarily yielded up their feudal rights to the Mikado and placed their territories under his direct control as Head of the State. It was decided that Yeddo was to be the seat of government instead of Miaca; and the leading Daimios were to form a sort of Parliament or Consultative Chamber to whom all matters of home and foreign policy were to be referred.

But while matters progressed thus favorably in the South, there were serious troubles to be confronted in the North. Towards the close of 1868 numerous malcontents of the Clan of Tokugawa had taken possession of Hakodadi and professed their determination to establish an independent principality for themselves and their adherents in the island of Yesso. Under the leadership of Eno-moto they held the place all through the Winter and Spring; and it was only in July 1869 that Hakodadi was recaptured and Enomoto taken prisoner. It is satisfactory to be able to report that these men were treated with considerable leniency by the Japanese government. Had they fallen into the hand of Chinese officials they would certainly have met with a far different fate. Early in the Autumn the late Tycoon Stotsbashi was reconciled with the government and many privileges of which he had been previously deprived were restored to him.

The reception of the Duke of Edinburgh by the Mikado on the occasion of his visit to Japan at the close of the Summer was of the most cordial and friendly nature. There was an unusual display of magnificence, and no effort was spared to render the event memorable. It was a curious comment on the after reception of the Duke by the Chinese government at Pekin and might be taken as a fair gauge of the genuineness of the liberal views professed by both governments.

On the 12th of February there was a dreadful storm at Yokohama and an immense amount of property was destroyed both there and at Yeddo. Its effects were even felt on the China Coast, and the opening of the Peiho to navigation on the 13th and 14th of the same month was no doubt in a large measure due to the breaking up of the ice under the influence of the high winds that prevailed.

It is painful to have to record amongst the events of the year under review a bitter persecution of native Christians in the neighbourhood of Nagasaki. Early in the Winter about 700 supposed converts were seized on a charge of professing christianity and forcibly removed to some unknown destination in the interior. Some of the foreign Ministers at Yeddo interested themselves warmly on their behalf and strove to mitigate their hard lot. It does not appear however that their efforts were crowned with much success. Her Majesty's Minister, Sir Harry Parkes, was particularly earnest in his desire to help them; but their fate is shrouded in much mystery even up to the present time.

1870

The history of 1870 in China is in a conspicuous manner the natural sequence of the events of the preceding year. Causes were at work in 1868 and 1869 which led with almost unerring certainty so far as foreign relations are concerned to the unhappy events that culminated in the sad catastrophe of Tientsin. Knowing what we do of China and the Chinese it would have been quite possible to have predicted with tolerable certainty the course of events in 1870. The premises were at hand and it was only necessary to draw the conclusion. A great reservoir of national

passions was being systematically tapped at various points; the embankments were being weakened; a cutting made here and there with more or less indifference to the possible results. It was felt by many that these experiments were full of danger. They might be merely tentative in their nature, but they could be hardly persevered in without leading to some formidable outburst of the pent up waters.

Many members of the foreign community, however, thought differently. They deemed it possible to tamper with the national prejudices of the Chinese people—to allow them to break bounds at one point and another, and afterwards restrain them within their legitimate limits. A great mass of ignorance and suppressed passion was being directed against foreigners all over the country, but it was argued that there was no connection between the various events as they occurred, and that nothing serious could come of isolated facts in Formosa, Fuhkien, Shantung and Kiangsu.

In March the Protestant Chapel at Shak-loong in the province of Canton was burned down. In May rumours about kidnapping began to spread along the valley of the Yangtze, and towards the end of the month Nankin became a focus of intense excitement. Early in June troops had to be called out and the city put partially under martial law. It was said that numbers of people were being spirited away and kidnapped all over the country, and that drugs and philtres were employed to bewitch the unhappy victims, whose eyes and hearts were supposed to be needed for medical purposes. At first there was no direct mention of foreigners in connection with these fabrications, but after a little time the feeling got wind that they were at the bottom of all mischief. Then the excitement increased and the French Mission was threatened by riotous mobs with sack and plunder. The authorities in the meantime acted with most injudicious weakness and issued proclamations giving apparent credence to the very wildest of the rumours in circulation. They went a step further, and absolutely decapitated some unfortunate creatures who were charged with kidnapping and forced under torture to make confession of the crime. But this only added fuel to the fire, and in a short time the city was actually in a state of siege. At this juncture, however, the Viceroy MA took the matter earnestly in hands. He visited in person the French Mission to satisfy himself that the charges directed against the priests were not true. And being persuaded of this fact he at once issued proclamations of a reassuring nature

and threatened with the severest penalties any one found propagating the false rumours about kidnapping. Troops were posted all over the city; the assembling of crowds was strictly forbidden, and measures were taken so effectively that in a short time the excitement began to die out of its own accord.

But the evil did not end here. The fever of excitement spread like wild fire all over the country. From Nankin it made its way to Chinkiang, from Chinkiang to Yangchow and from thence northward viâ the Grand Canal into Shantung.

Meanwhile a similar movement was studiously set on foot throughout the province of Chihli. Early in June Tientsin became the theatre of the anti-foreign disturbances. The usual tales of kidnapping and scooping out children's eyes were skilfully propagated amongst the people. Placards were posted all over the city recounting horrible stories about the French Missionaries and Sisters of Charity. The mutilation of the dead and desecration of graves were only part of the crimes laid to their charge. In broad day light, under the eyes of the local officials and apparently with their approval, popular enthusiasm was worked up against them. The masses were encouraged to rid themselves of the hated presence of the "foreign devils;" and the city magistrates gave color to the accusations made by having two men executed on a charge of kidnapping. What followed has been well told by a writer in the *North-China Herald.*

"Worked upon by rumours thus publicly endorsed by their officials, it is not surprising that the mob reached the climax of terror and fury which found expression in the massacre of the 21st June. Our knowledge of the incidents of that day is derived chiefly from native sources, as only one foreign witness, a Frenchman named Courtris, remains alive of those who were on the spot. From one source or another, however, very full particulars have been gleaned, and have been fully recounted in the correspondence that has found place in our columns. Early on the morning of the day which had been fixed for the outbreak, a large crowd assembled in front of the Consulate and Mission premises; soon, one of the City Magistrates visited the Mission, ostensibly to make enquiries about a member of the establishment who was accused of purchasing children. He according to the evidence of M. Courtris, who was present during the interview, declared himself perfectly satisfied, and averred that he only went through the formality in order to satisfy the people. Still, on leaving the

Yamên, he took no steps to calm the mob. The French Consul wrote to represent to Chunghow the threatening appearance of the crowd, but no steps were taken to disperse it, although this official had some hundreds of drilled troops under his command. The mob commenced to throw stones; M. Fontanier went personally to Chunghow; of what passed at the interview, we have no clear record; but certainly it produced no result, and we may well believe it was stormy. M. Fontanier seems to have left in anger. On his way back he was murdered, after, it is said, firing a shot from his revolver. The circumstances of this occurrence are important, but are variously related. That on which we place reliance is that the shot was fired at the Hsien, whom he met on his way through the crowd, and whom he heard encourage the mob in their violence. M. Simon the Consular secretary, was killed too. A general attack was made on the Consulate and Mission premises, and their occupants were cut to pieces. The mob then turned to the establishment of the Sisters of Charity, and murdered all the occupants with horrible barbarity. Altogether twenty-one foreigners, including the French Consul, his Secretary, a member of the French Legation at Peking and his lady, a French storekeeper and his wife, three priests, ten Sisters of Charity, and a Russian merchant and his wife, fell victims to the popular rage, besides a number of the Chinese converts and employés on the Mission premises, and thirty children who were smothered in the vaults of the burning buildings. The cry was raised to attack the Foreign Settlement and exterminate the remaining foreigners, but whether from fear of resistance which might be encountered, whether the rioters were tired, or whether the officials, alarmed now for the probable result of the day's work, exerted successfully their influence, the crowd fell away, until those remaining when the bridge approaching the Settlement was reached, concluded that they were too few for the exploit, and arranged to resume their work on a subsequent occasion.

"In the meantime, the flames of the burning buildings, and the reports brought in by natives of what was taking place, had of course excited alarm in the Foreign Settlement. The residents organised themselves for defence, and the S. S. N. Co.'s steamer *Manchu*, which was in port, loaded her guns and trained them so as to command the Bund. A man was found in the steeple of the Church with fuel and a light, (another Guy Fawkes) ready to fire the beacon which was to be a signal for attack. There was

no man-of-war in harbour; but the residents, left to their own care, patrolled the Settlement for several days, and to this precaution, and to the accidental circumstance of heavy rain, may probably be attributed their immunity. The Chinese had fixed their next attack for the 23rd; but on that day occurred, after a long drought, one of the heaviest falls of rain remembered in the North of China; and the superstitious saw, in this, divine approval of the massacre. Not only in Tientsin but in Peking, and even in Shanghai the same tale was told. The Emperor and the Mandarins had in vain prayed for rain, but directly this good deed was done, Heaven vouchsafed it. With renewed courage, accordingly, the rioters appointed the next day for their exploit; but, unable to restrain the propensities evoked by the prospect of such rich plunder, some members of the crowd began robbing the market people of their produce, as they passed them coming into town. The villagers resisted, and a fight ensued, in which Chunghow's soldiers at last espoused the cause of order, and the mob was repelled. On the 25th, the *Opossum* arrived, and the residents were able again to breathe freely."

The alarm and uneasiness which followed this terrible tragedy cannot be easily described. At Newchwang, Chefoo, Ningpo, Shanghai and all along the valley of the Yangtze to Hankow the excitement was very great. Business was totally suspended for a time, and apprehensions were entertained of still further outbreaks of popular frenzy. At Chefoo the trading steamer *Manchu* had to lie 24 hours in port with her guns loaded to protect the foreign settlement against a threatened attack. Ningpo was in a still more disturbed state and slandrous placards were circulated throughout the city and neighbourhood, and certain days even fixed for the extermination of the foreigners. At Shanghai very serious alarm prevailed—especially after the departure of H. M. S. *Dwarf* for the North, when there was not a single foreign man-of-war left in port for the protection of the Settlement and the large interests at stake there. An appeal to the community to resuscitate the Volunteer Force was responded to with earnestness; and 500 men were promptly enrolled. The Municipal Council gave an admirable impulse to the movement by undertaking the expense of arms and ammunition for the new corps. Everywhere it was feared that a crisis was at hand; and in the absence of adequate protection from the Home Governments the energy and self reliance of the handful of foreigners located both in Shanghai and at the out-ports were conspicuously displayed.

It is scarcely within the scope of this paper to discuss the question as to how far the Central Government was responsable for the massacre. The opinion has been freely expressed however that Chunghow would scarcely have tolerated what happened had it been unpalatable to the authorities at Pekin. Even Her Majesty's Chargé d'Affaires in one of his published despatches to the Home Government seems to have had grave suspicions as to their complicity in the tragedy of June.

On the 3rd of August the remains of the victims were publicly buried at Tientsin in presence of the French and British Ministers, the Admirals of both nations and the Commissioner for trade for the northern ports, Chunghow.

Immediately after the news of the massacre reached Pekin, Count Rochechouart, the French Minister, entered into negociations with the Imperial Government for the purpose of punishing the rioters at Tientsin and obtaining reparation for the outrage. The history of the negociations that ensued and of the final settlement will be best told in the words of the writer already quoted. Nothing could have been more unfortunate however for Count Rochechouart's success than the out-break of the Franco-Prussian war in July and the subsequent disasters that befel the French nation. All the energies of the country were needed for the terrible conflict that raged at home. France in a death struggle with Germany had no time to devote to China, and the consequence was, that the Minister was left in a perfectly helpless position, and without any prospect of assistance from his own Government.

"A joint note was addressed to Prince Kung by the Foreign Ministers, directly news of the outbreak reached Peking (*N.C.H.* Sept. 22), and assurances were given of the speedy punishment of the culprits. Tseng-kwo-fan and Chunghow were appointed Commissioners to investigate the matter, and drew up (*N. C. H.* Sept. 29) a joint report, recognising the main facts of the outbreak and entirely exculpating the Missionaries from the charges brought against them. Neither in this case, however, nor at any subsequent time, could the Chinese be induced to recognise the guilt of the Tientsin Mandarins, in any higher degree than inability to preserve order; while of the complicity of Chên-kwo-jui, who was accused of leading and encouraging the rioters, they refused to entertain a suspicion. It will be sufficient for us to refer to the admirable letter by Messrs. Lees and Hall (*N. C. H.* July 14),

and the description of the converts (Aug. 4) after their release from the Hsien's yamên, written by an English surgeon, to prove, on the other hand, that the whole affair must have been carried out, from beginning to end, with official foreknowledge and approval. Count Rochechouart, dwelling on the clear evidence of foreknowledge and complicity, demanded the execution of the Prefect and Sub-Prefect and of Chên-kwo-jui, as an essential feature in a settlement; and foreigners throughout China approved his demand. Monetary compensation, further than would suffice to compensate for actual loss, was deprecated; and the punishment of the actual rioters was felt to be of much less importance than that of the Mandarins who had instigated and approved the crime. What was needed was a settlement which would prove that foreign lives could not be taken with impunity, and which would deter officials who might incline to countenance similar outbreaks elsewhere. We cannot but think that, had the Foreign Representatives joined in a peremptory demand to this effect, at the outset, a prompt and satisfactory settlement might have been summarily obtained. Unfortunately, however, there seems to have been a tendency in the English and American Legations to regard the affair too much as one in which the French only were interested; instead of accepting it as an insult and a threat of danger to all foreigners in China. The Chinese people do not draw a clear line between nationality and nationality; to them a foreigner is a foreigner; and though the French had incurred the original odium in the present instance, they would not be likely to stop, in a fit of extermination, at the extinction of one sole nationality. The general prestige of the foreigners in China was shaken by the events of the 21st June; and it behoved us to regain our lost ground with promptness and decision. Negociation, however, pure and simple, was relied on; and it seems, unfortunately, that the French Chargé d'Affaires, while acting to a certain extent with his colleagues, pursued at the same time independent negociations, thus weakening the force of the collective pressure.

"However this may be, month after month passed by, without a single act of punishment or reparation being accorded. And the gravity of the event was thus magnified by the proof it afforded of the weakness or ill-will of the Central Government, and the encouragement given by the delay and by our inaction, to the ill-disposed among the people. It was understood that Prince Kung favoured a settlement which should satisfy foreign claims;

but that two of his brothers threw their weight into the hostile scale—advising war rather than the slightest concession. Tseng-kwo-fan, too, was believed to oppose effectual measures of reparation, holding the people excused because they were mistaken. Popular report among the Chinese even went further, and said that he approved the massacre, and the action taken by the mandarins to bring it about. Whether this be really the case; whether Tseng-kwo-fan's removal from the Viceroyalty of Chihli were his own wish; or whether he was excluded to make room for a more vigorous administrator, it is very difficult to say. Suffice it that Li was eventually called in, and that then only, at the end of October, nearly four months after the outrage, did the Chinese Government show any desire to repair and punish the wrong done by its subjects. Almost simultaneously with the appointment of Li to the viceroyalty, Ting-jih-cheng was called up from Kiangsu, to aid in arresting and trying the rioters. And shortly after Li's arrival, the Central Government announced the terms which it was willing to concede. Twenty of the rioters were to be executed; Tls. 460,000 were to be paid in compensation for lives lost and property destroyed; and the two Magistrates were to be banished for ten years to the Amoor. The damage done to the English and American Mission premises during the riot was also to be made good; and Chunghow was to go home, to apologise to, and endeavour to conciliate, the French Government. These terms have been fully discussed in our columns, and repetition of the arguments put forward to show their inadequacy, would be tiresome. They were neither accepted nor rejected by the French Minister, who referred them to his Government. Hitherto, sixteen only of the prisoners have been executed; the remaining four, who are supposed to have been concerned in the murder of the two Russians, are held over during the pleasure of the Russian Consul-General, who wishes to satisfy himself of their actual complicity. It is always easy, in China, to find men willing, for a few taels, to be executed in the stead of another; and there is reason to fear that those executed at Tientsin were not prominent rioters, but were selected because they were willing to sell their lives. From Tls. 350 to Tls. 500 each was paid to their families as compensation for their loss; they were dressed out as for a theatrical display, escorted to the execution ground by a number of admiring and excited friends; and a memorial temple is spoken of, to commemorate their patriotic death. The sentence of banish-

ment passed on the mandarins, was one to which similar doubt attached. Foreigners could never know certainly whether it were carried out; and already the report obtains that they have been allowed to retire quietly to their homes. Chen-kwo-jui, whose execution was demanded by M. de Rochechouart, as that of a ringleader in the riot, is barely mentioned. Prince Kung briefly declares him completely innocent; and passes on. Yet there is strong evidence that this mandarin led the rioters to the attack, and encouraged them to "burn and kill." He has since been intimately associated with the Seventh Prince, who was the strongest advocate for war.

"The negotiations which led to this abortive settlement have been severely criticised, and the failure has been attributed to the mistaken action of the foreign ministers. We cannot but think there is some truth in this belief; for we cannot but believe the Chinese would have yielded implicitly to a joint demand, pressed with sternness and energy. We have already shown that a joint letter was written, in the first instance; but we fear that M. de Rochechouart's collateral negotiation tended, subsequently, to weaken collective pressure; and that Mr. Wade and Mr. Low acted rather as arbitrators than as complainants. We are convinced that the terms actually obtained are greatly due to the influence of these two Ministers; but we think a more satisfactory settlement might have been obtained, had they taken a different attitude and a more decided tone at the outset. Thus far, English papers seem to think the affair satisfactorily concluded. It remains to be seen how far this opinion may be affected by detailed accounts of the executions; and how France will view the settlement, when she again has leisure to turn her attention to the East."

But few events of striking importance seem to have occurred in the internal politics of the Empire during the course of 1870. Doubtless many incidents took place having a material influence on the national life which it would be well to record if we could only lay our hands on them; but in a country like China where news travels slowly, where inland communication is so imperfect, and where rumour and fact are in many cases indistinguishable, it is difficult to obtain reliable and trust-worthy data.

The most important politically speaking was the assassination of Ma-Sin-yih, the Viceroy of the Two Kiang, at Nanking in July. Ma, a Mahommedan, had raised himself by his unusual energy to a position which none of his coreligionists had occupied for cen-

turies. As Governor at Hangchow he had repressed more than one popular display against the Missionaries, and when promoted to the Viceroyalty as related above he showed equal energy. His love of justice had probably rendered him obnoxious to many of his own people; at all events he was employed holding the military examinations at his capital when an assassin stepped out of the crowd and plunged a dagger into his body. The wound proved mortal in a few days, but though every means were nominally tried to discover the motive that led to the crime, the totally different accounts put forward render it a greater mystery than ever. There is reason to believe that it was instigated by one of the secret associations which have with the decline of the present dynasty become so powerful in China. In such a case the Government would be very likely to refrain from even alluding to the subject in its published records.

In Ma's place Tsêng Kwo-fan was ordered to again take the seals of office at Nanking; giving up those of the Imperial province to Li-Hung-chang. Tsêng had, whether rightly or wrongly, come to be viewed with suspicion in connection with the Tientsin tragedy, and his failure to satisfy the requirements of the French and other foreign Ministers afforded a plausible excuse for his reduction to a nominally lower rank. Li had the advantage of being too far away at the time to have his name spoken of in connection with the affair of the 21st June, a circumstance which probably rendered the settlement afterwards effected the easier for the Chinese Government. The Tientsin excitement did not subside for some time. At Wooching on the Poyang lake a chapel belonging to the Catholic Mission was destroyed, as was also one at Foochow, while a chapel just erected by the native protestant converts at Fatshan was likewise demolished. Outrages of less moment took place in Shansi and Pechili, and two British men-of-war had to be sent to Yangchow to remove thence the American Missionaries whose lives had been openly threatened. The Magistrates, notwithstanding, expressed surprise at their fears, but it was thought wise that they should not return for some time. After an absence of some two weeks it was decided to take the mandarins at their word and the U. S. Frigate *Benicia* accordingly carried back the Missionaries to their quarters where they met with no further molestation.

In the autumn the Chinese Government decided on sending a mission to Europe and more especially to France to explain its

conduct with regard to the massacre at Tientsin. Chunghow, Imperial Commissioner of Foreign Trade at the Northern Ports, and who had resided at Tientsin previously and during the outbreak was chosen as its head; indeed in a great measure it was understood that he went to explain in person his connection with the affair. Chunghow's position as a member of the Imperial family and an officer holding a high official position rendered this mission of a very different type from previous attempts at opening diplomatic relations with the Western powers. The Shanghai General Chamber of Commerce sent to the British Government a protest against the reception of the embassy, believing that Chunghow's prior innocence of the affair of 21st June had never been clearly made out, and that while such grave suspicions of complicity hung about him it was inadvisable that an official reception should be granted.

The Chambers of Commerce of Shanghai and Hongkong, having both undertaken to extend the knowledge possessed by the outer world of China, published during the year reports of the Baron von Richthofen and Mr. Moss on the central and southern portions respectively. The reports of the former especially are full of valuable facts and suggestions, as to the commerce, productions, natural history and geology of the portion visited. The uneasy feeling prevalent in consequence of the affairs at Tientsin postponed the completion of the Baron von Richthoven explorations. Efforts were at last made during the year for the improvement of the approaches to Shanghai, and lighthouses were erected on Gutzlaff and the North Saddles and commencement made of others. Nothing was however done in the equally important task of keeping in good order the harbours open to foreign shipping. The interference of the authorities at Canton with the trade of Hongkong was still continued and in effect that port was almost blockaded so far as native craft were concerned.

The recent opening of the Suéz Canal commenced during this year to exercise an influence on the course of trade. The accounts of the first vessels which passed through were read with interest, and as the practical success of the measure became assured beyond doubt, it became more and more evident that a radical change in the method of conducting trade between Europe and China was imminent. An event which may possibly eventually prove of importance occurred in the occupation of Ourga in May by a company of Russian soldiers. The Russians deemed it necessary to adopt this

course from the fact that the Chinese government had not afforded due protection to the mails passing overland to Peking. The evils of Coolie emigration from Macao assumed increased dimensions during the year under review. The Hongkong government took what steps it could in the matter, but failing the power to effectually stop the traffic, its acts amounted to little more than a protest against a trade, which under the name of free emigration proved little better than an organised slave trade.

The burning of the British Consulate at Shanghai on the night of the 23rd December is worthy of record in these pages, especially as many curious and interesting documents reaching from the foundation of the Foreign settlements were destroyed. Severe earthquake shocks occurred at Bathang and Swatow. That at Bathang took place in the month of April; the town was said to have been destroyed and 1,000 lives lost amidst its ruins. On the 2nd November a shock occurred at Foochow at 12.30 P.M. An earthquake shock was also felt during the year at Swatow.

While China however was content to travel in the old groove, Japan was active in accommodating her civilisation to that of the West. The capital of the country was fixed at Yeddo, and the Mikado on more than one occasion appeared in public, an act utterly unlike the customs of the Imperial occupant at Peking. Reforms were introduced in the positions and powers of the Daimios with a tendency to consolidate the government, and generally speaking a feeling of greater fidelity and obedience to the central government was being displayed. Mr Lay's commission with regard to the railway loan was withdrawn, apparently on account of certain hostile criticisms which appeared on the line of conduct pursued by him with regard to its issue. The enterprise was however not abandoned and a commencement was made with the engineering works. Although willing to follow the lead of the great nations of the West in its advance towards material civilization, the Japanese government did not display the same liberality in religious matters; a persecution of Christians was set on foot and three thousand were said to have been banished. Buddhism was likewise proscribed in favour of Sintooism, the ancient religion of the land; it was reported however that a large sum of money paid to the government by the Buddhists priests secured for them for the present at least an immunity from persecution. Commercially the year was one of progress, though on more than one occasion it required energetic protests to prevent the government from yielding

to that worst of temptations to a weak or ignorant power, that of granting monopolies or interfering with the purity of the currency.

During the summer months of the year 1870 strenuous proceedings were taken by the Chinese Government for the subjugation of certain lawless districts in the neighbourhood of Swatow; as no account of those affairs has ever been made public, the following memorandum furnished by a correspondent at Swatow is worth putting on record:—

"The Prefecture of Chaochów, in which Swatow is situated contains nine districts, the names of which are as follows:—Chieyang, P'aling, Chaoyang, Hwaylai, Ch'ênhai, Haiyang, Jaoping, Fungshun, and Tap'u. Of these the last is inhabited by a peaceful and studious people, most of whom are Hakkas; and Fungshun is also quiet and orderly except in that portion which borders on Chieyang. The remaining seven districts have long been notorious for the turbulent and lawless nature of their inhabitants. These are commonly supposed to be in great part descended from Fuhkien pirates, who were wont at the beginning of the present dynasty to ravage the coasts of China especially in the neighbourhood of their own province. These pirates drove the original inhabitants out of their homes and then took possession of their houses and lands. The settlers in the abovementioned seven districts of this Prefecture had for about 100 years lived in a state of actual rebellion against the Government. They refused to pay taxes, to acknowledge the authority of the Mandarins, or in any way to own allegiance to the rulers of China. They banded together in clans and lived as independent communities, making their own Municipal Regulations, and acting as if the land, rivers, and sea were their possession. Most of these clans lived chiefly by plunder and forced contributions on persons and goods. They were constantly going to war with each other on the slightest provocation. The invaders in every case slaughtered those of the inhabitants whom they found, rifled the houses, and then set fire to them.

"One of the worst of these places was a country town called in the native dialect *Wasoa* and lying in the district of Ch'ênghai. A few years ago this town was occupied almost exclusively by two clans—one named Wang and the other Hsie. The united members of these clans I have been assured amounted to 20,000 men. Immense numbers of coolies are said to have been kidnapped by them and despatched to Macao, nor could even the power of the

Governor General terrify them into good conduct. The chief offender and also the leading man among them was one of the *Hsies*—whose name was *K'unkang*. This man had obtained from the Government the button of a third rank officer by means of large money contributions, and he ruled with almost absolute power over the rest of the inhabitants. He is represented as having been fierce and cruel in the extreme. He slaughtered the whole family of a relative with the exception of a little boy who lived to be revenged. This man had also in his premises cannons, and other firearms which he had not failed to use.

"The lawless doings of these clans became notorious and the numerous sufferers complained as well at Peking as at the provincial capital. The result was that the Governor General memorialised the Throne and succeeded in obtaining the appointment of two military officers to reduce the rebellious districts. Fang, however, a Mandarin of the second rank alone had charge of the actual work. On receiving his commission this officer took command of a large body of men and proceeded at once to Hwaylai. He soon reduced the district to submission—burning many of the houses and putting not a few of the inhabitants to death. From Hwaylai he went to the north corner of Chaoyang, and having subdued that went on to Chieyang, which was one of the worst districts. Having slain a considerable number of the chief plunderers and brought about two-thirds of the district under submission, Fang carried his victorious arms into P'aling, to the southward of Chieyang. Thence he returned to Chieyang, and from that went down the river to *Wasoa* which is only a few miles from Swatow. On his approach nearly all the Wangs fled and Fang burnt their houses. The chiefs of the Hsies remained behind and on being captured were beheaded. Their leader K'unkang was executed and with him the second of his 10 sons. The third son is retained as a hostage, and the remaining eight are allowed to live at large. From *Wasoa* Fang returned to Chieyang where he remains now.

"One of the worst places still unsubdued is Sualing, which has a chief of its own—usually styled the Emperor of Sualing. This man, whose name is Chêng, has long been a terror in the neighbourhood—levying exactions and committing all manner of depredations."

NOTE

A correspondent of the *N. C. Daily News* writing December 20th, 1870, says—

"Foochow or more properly speaking Nantai, the foreign Settlement in fact has been again the scene of one of those dreadful specimens of Chinese cruelty and inhumanity which were recorded in your columns some four or five months since. For a period of five or six days a crowd was seen assembled on the bridge, inspecting and apparently enjoying the torture inflicted on one of their fellow countrymen, who was exposed to the public gaze in a wooden cage with his arms and legs imprisoned, and his feet scarcely able to touch the ground in consequence of the manner in which his head was secured in the upper part of the cage. In the evenings he was removed to a quiet spot, where he was temporarily relieved by having a few bricks placed under his feet—not that his keepers had any sympathy for him, but merely as we are informed to prolong life until the following day when he would be replaced on the bridge, there to suffer until death ensued. Even after life was extinct, which I think proved to be on the sixth day his body was left hanging in the cage for several days, for the benefit (?) of the public. If I am correctly informed there is a circumstance connected with the above atrocity which makes it still more revolting—if possible than it otherwise would be—that the culprit referred to, was at the mercy of a certain big Celestial well known in Nantai who if he only chose to give his consent, could have released this man from his torture and had him despatched in a proper manner."

ERRATA.

Page 36, 16th line,—for *δχιμων* read
δαιμων

Page 158, 5th line,—for absolute characters read
obsolete characters

JOURNAL

OF THE

NORTH-CHINA BRANCH

OF THE

ROYAL ASIATIC SOCIETY

FOR 1871 & 1872.

NEW SERIES No. VII.

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1873

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REPORT

OF THE

COUNCIL OF THE NORTH-CHINA BRANCH

OF THE

Royal Asiatic Society

For the Year 1872.

THE following gentlemen were elected office-bearers at the first meeting of the year:—

C. W. GOODWIN, Esq., President.
F. B. FORBES, Esq., } Vice-Presidents.
ALEX. WYLIE, Esq., }
T. G. SMITH, Esq., Secretary.
J. E. REDING, Esq., Corresponding Secretary.
A. HEIBERG, Esq., Treasurer.
H. CORDIER, Esq., Librarian.
W. B. PRYER, Esq., Curator.

The Rev. Canon BUTCHER.
The Rev. J. THOMAS,
D. J. MACGOWAN, Esq., M.D.,
DR. WELLS WILLIAMS, L.L.D.,
T. W. KINGSMILL, Esq.,
T. DICK, Esq.,
C. J. KING, Esq.,
J. M. CANNY, Esq.,
A. MICHIE, Esq.,
J. HAAS, Esq.,
} Members of the Council.

During the year 1872 ten Resident and seven Non-Resident Members have joined the Society. Four Members have resigned in consequence of their departure from Shanghai.

A list of the present Members of the Society is herewith appended.

The following papers were read during the year:—

On the Antiquities of Cambodia,
by J. Thomson, Esq., M. R. G. S.

Suggestions towards a Phonetic System for the Chinese Language,
by E. Solbé, Esq.

On the Aborigines of Hainan,
by R. Swinhoe, Esq.

Mutton Wine of the Mongols, and Analogous Preparations of the Chinese,
by D. J. Macgowan, Esq., M. D.

The Life and Works of Han Yu or Han Wen Kung,
by T. Watters, Esq.

Narrative of an Exploring Visit to Hainan,
by R. Swinhoe, Esq.

On Art Exhibitions in China,
by D. J. Macgowan, Esq., M. D.

On the Obligations of China to Europe, in the matter of Physical Science, acknowledged by eminent Chinese, being Extracts from the Prefaces to Tseng Kwo-fan's Edition of Euclid, with brief introductory observations,
by Rev. G. E. Moule.

On Chinese Legends,
by G. C. Stent, Esq.

On the use of Shad or Samli, in Consumption by Chinese Doctors, in a manner analogous to the use of Cod Liver Oil in Europe,
by D. J. Macgowan, Esq., M. D.

Notes on the Natural History of Northern and Western China,
by the Rev. Père Armand David,
Miss. Lazariste.

The liberality of the British Government and of the foreign community having enabled the Society to enjoy the use of a suitable building without charge of rent, it may now be hoped that the Society will be in a better position to carry out the objects for which it was established.

Appended is the balance sheet for the year 1872 showing a surplus in hand of Tls. 277.52.

Librarian's Report.

I have but few remarks to make in handing the List of the Works presented to the Society during the year 1872.

The arrangement of the books removed from the old premises of the Society in the Nankin Road, during the previous year, has been proceeded with and is so far completed that it will be possible to throw open the Library whenever the Council think it proper.

The Catalogue of the Books has also been printed and whilst it will be a help to students in their researches it shows the deficiency of the Library in many departments of Science and Literature. As this subject has already been brought to the notice of the Society in a letter I addressed to the President on the 3rd ultimo I shall not dwell upon it now.

HENRI CORDIER,
Hon. Librarian.

List of Works presented to the North-China Branch of the Royal Asiatic Society during the year 1872.

Transactions of the Russian Geographical Society (in Russian) Nos. 1, 2, 3, 5/8 (1871). J. E. Reding, Esq.

The two concluding vol. of the Voyage of the Austrian Frigate "*Novarra*" round the world. J. Haas, Esq., for the Board of Public Education (Vienna).

Transactions of the R. Geog. Soc. at Dresden (1870). The same.

The Chinese Recorder. Editor.

Bulletin de la Société de Géographie de Paris. The Geog. Soc.

From the Rev. E. W. Syle—
Chinese Calendar 1848, 1849, 1851, 1853 and 1855.
Shanghai Almanack 1857, 1858, 1860, 1861.
Description of the City of Canton 1839.
Dr. Medhurst's Journey into the Interior of China 1849.
Canton Miscellany No. 1 (1831).
Rep. of the Morrison Education Society 1864, 1865.
The Phœnix, Dec. 1871.

From the Zoological Society of London—
Proceedings 1869, Pts. 2 and 3. 1870, Pts. 1, 2, 3. 1871, Pt. 1.

From the Royal Geographical Society—
Journals, Vol. 13, No. 5. Vol. 14, No. 1/5. Vol. 15, No. 1/4. Vols. 39 and 40.

From the Royal Society—
Proceedings, Vol. 17, No. 110/118.

From the Geological Society—
Vol. 26, Pts. 1/4. Vol. 27, Pts. 1/4. List of the Geol. Soc. Nov. 1/70.

From the Statistical Society—
Journal, 1869 Dec. 1870 Mar., June, Sept. and Dec. 1871 March, June and Sept.

From the Royal Asiatic Society—
Journal, Vol. 5, Pt. 1.

From the Royal Society of Edinburgh—
2 vols. Session 1868/69.

From the American Philosophical Society—Nos. 82 and 86.

"Chronique de Tabari." Trad. par Herman Zotenberg, Vol. 2, 1869. Or. Transl. Fund.

Die Fossilen Mollusken des Tertiaer, Beckens von Wien. J. Haas, Esq.

From A. Heiberg, Esq.—

Den Christelige Ethik fremstillet of H. Martensen. Kjobenhavn 1871.
Codigo de Comercio. Madrid 1863. 8vo.
For Ide og Virkelighed. Kjob. 1870-1871, 17 parts.
Statistik Handbog for Kongeriget Norge I Hefte, 1871.
Om Kompassets Deviation, Kristiania, 1869.
Der Act. Geschëfts Kalender 1871-1872.

Table for transmitting Chinese Despatches by telegraph, by S. A. Viguier, Esq. Shanghai 1871. Author.

Mookerjee's Magazine, Vol. I, Nos. 1/3. Editor.

Catalogue of Chinese Objects in the South Kensington Museum, by C. Alabaster, 1872. Author.

Heike Monogatari, Récits de l'hist. du Japon, par François Turrettini, 1ere Partie, 1871. Author.

The Natural History of Hainan, by R. Swinhoe. Author.

The 100 Years Anglo-Chinese Calendar, 1st Jan. 1776 to 25th Jan. 1876, by P. Loureiro. Shanghai 1872. Author.

Notes on some plants from Northern China, by Henry F. Hance. Author.

A Compendious Supplement to Mr. Bentham's Description of the Plants of the Island of Hongkong, by H. F. Hance. Author.

A Revised Catalogue of the Birds of China and its Islands, by R. Swinhoe. Author.

Discorso del Comm. C. Negri, Presidente delle Soc. Geog. Italiana, 1871. Italian Geog. Soc.

The Marriage of the Emperor of China, by L. M. F. Authoress.

HENRI CORDIER,
Hon. Lib.

SHANGHAI, *1st January*, 1873.

Treasurer's Report.

The Balance Sheet for the year 1872, which I have now to present, seems an encouraging one as compared with those of late years, and to the funds in hand December 31st will soon be added between three and four hundred taels due from member for 1872, whose subscriptions have not yet been collected. A fair balance will therefore be left after paying the cost of the Journal for 1871-72—that of the catalogue having already been paid.

P. K. DUMARESQ.
Acting Hon. Treasurer N. C. B. R. A. S.

December 31st, 1872.

BALANCE SHEET OF THE

North-China Branch of the Royal Asiatic Society

Dr. **FOR THE YEAR 1872.** *Cr.*

RECEIPTS.	$	cts.	Tls.	cts.
To Balance received from A. Heiberg Esq. Hony. Treasurer			96	10
„ Subscriptions and Sales of Journals for 1871			532	93
„ Subscriptions collected for 1872 at 76	300	00	228	00
			857	03

DISBURSEMENTS.	$	cts.	Tls.	cts.
By Sundry Expenses and Advertisements			124	13
„ Fire Insurance			30	00
„ Printing			425	38
„ Balance, ...			277	52
			857	03

P. K. DUMARESQ,
Acting Hon. Treasurer N. C. B. R. A. S.

LIST OF MEMBERS.

HONORARY.

Sir Rutherford Alcock, K.C.B.
Sir Brooke Robertson, K.C.B.
Vice-Admiral Shadwell, C.B.
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ARTICLE I.

A HISTORICAL AND STATISTICAL SKETCH OF THE ISLAND OF HAINAN.*

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H. B. M.'s Acting Consul at Chefoo.

WELL-NIGH two thousand years have elapsed since the attention of Chinese statesmen was first attracted by rumours concerning the existence of a great island, lying secluded far away in the tropical seas that roll outside the borders of the Middle Kingdom, many hundred leagues beyond the limits within which, according to their knowledge and steadfast belief, the principles of social order and humanity were confined. Seated in its splendid capital in the midst of the temperate region of north-western China, the newly-founded government of the Han dynasty had little cognizance, a century and a half before the birth of Christ, of the territories stretching southward from the Yang-tsze, and now constituting a full half of the Chinese Empire. The sacred books contained, indeed, a reference in more than one passage to the southern frontier-races, from whom, according to the legends which constitute the Book of History, ambassadors had come in the most ancient times to cement alliances with the founders of Chinese polity; but of the condition, government, derivation, and language of the tribes or nations who dwelt beyond the rugged

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mountains of Yüeh and Ts'u (as the modern region of Fukien, Kiangsi, and Hunan was at that time denominated) and who occupied the enormous tracts of this untravelled country, nothing was known by the polished disciples of Confucius, careless, like their modern descendants, of all extraneous affairs.

The first step toward a reduction of the countries extending on the South of what was then the territory actually subject to Chinese control—or, in other words, the modern region of Kwangtung, Kwangsi, and Tonquin—had been made under the auspicies of the famous conqueror who assumed the designation of She Hwang-ti, proudly declaring himself in this ambitious title as the First Founder of Universal Empire, and who completed, previously to B. C. 221, the work of subduing and consolidating the disjointed fragments of the Chinese Sovereignty, for the accomplishment of which a long ancestral line had continuously striven. This remarkable man, in whom was exhibited—even on the showing of his embittered enemies, the Chinese literati—one of the greatest governing minds the human race has produced, took early measures for bringing the territories South of the mountain-barrier beneath his sway. About the year B. C. 220, the conquering innovator despatched a general named Tu Hwei across the mountains, at the head of a formidable army, for the purpose of enforcing the submission of the natives of this region. Of the campaign that ensued, history has recorded few particulars; but enough has been handed down to make it clear that determination and valour, coupled with the command of enormous forces, and complemented by the free employment of that engineering talent which raised, at the other extremity of the Empire, the Great Wall of China during the same period, rapidly conducted the lieutenants of She Hwang-ti to a successful issue in their undertaking. True, it is related that Tu Hwei was defeated and slain in an engagement in which his forces were surprised by the hostile aborigines, close to the present site of the city of Canton, in the year B. C. 216; but his lieutenant and successor, Jên Ngao, speedily retrieved this disaster, and was able in the following year to announce the subjugation of the coveted region, which was thereupon incorporated with the Empire as the Province of the Southern Sea (Nan Hai), under the Vice-royalty of the general who had reduced it to submission. Of the individuality or condition of the inhabitants of the newly annexed territory at this period the meagre notices existing in Chinese history afford little means of judging. From the few

casual remarks, however, that may be gathered from widely scattered materials, it would appear that the indigenous tribes of Nanhai, at the period of Jên Ngao's conquest, were most probably a race akin to the stock from which the nations of Cochin-China and Cambodia were derived, and the direct progenitors, in all probability, of the Miao-tsze and other aboriginal peoples still maintaining a state of independence among the mountains of the South of China. It is certain that in the 3rd century B. C. the condition of what is now the central portion of Kwangtung had not attained to any appreciable degree of culture or organization. The tribes who successfully encountered Tu Hwei were enabled to resist the disciplined legions from the North not by force of warlike appliances, of fortified cities, or of military skill, but by the craft of the forest-born and unfettered savage, with the aid of natural difficulties presented by a wild and pathless country, overgrown with impenetrable woods, and offering neither supplies for the support of an advancing army nor facilities for the retreat of a force overtaken by disaster. Under the direction of the Chinese generals, however, military colonists were poured in thousands from the cultivated regions beyond the mountain-barrier of the Mei-ling into the newly acquired dependency; forests rapidly disappeared before the axe and fire, fortifications rose where cities were shortly to grow up; the noble rivers disclosed by the labours of the woodman served as a ready means of transport, and where these natural highways proved insufficient, artificial canals were dug to expedite the movements of the subjugating and colonizing armies. A central position for the seat of government was selected at the hills of P'an and Yü, where already a native town existed, and, by a well-directed choice, the foundations were planted here of what was to become in future the city of Canton.

To enlarge upon the natural advantages of this celebrated spot, lying, as it does, in the very centre of the great province of which it has been during nineteen centuries the capital, and so situated with reference to the provincial water system as to lie in close proximity with the converging point of noble rivers, flowing from the North, East, and West, and pouring southward from this locality in many broad and navigable channels to the sea, would be an undertaking foreign to the scope of the present inquiry. Suffice it to say, therefore, that here the nucleus of a city was gathered whose importance was no doubt foreseen, in part at least,

by the Chinese conqueror of the province, and which became the seat of government for the region newly added to the dominions of the Emperor.

A youthful adventurer from the extreme north-west of China had received a commission in the armies headed by Jên Ngao in B. C. 215, and had proved himself a capable and energetic subordinate during the ensuing labours of conquest and organization. A few years only had elapsed, and already the dominion founded by She Hwang-ti was tottering to its fall, on the withdrawal of the master hand which had achieved its astonishing greatness. The monarch's weak and unworthy son fell a victim to the intrigues of rival councillors, within a few months after he had ascended the throne, and the northern provinces of the Empire relapsed into a condition of anarchy and internecine warfare. At this critical period, Jên Ngao was overtaken by mortal sickness, and felt the necessity of entrusting the care of his Vice-royalty to a capable successor. Chao T'o, the young lieutenant above referred to, was summoned to his side, and was entrusted by the dying statesman with the charge of his high office. The historians state that to this bequest Jên Ngao added the advice that his successor should avoid the disasters threatened by a prolonged connection with the Chinese sovereignty in its then distracted state, by proclaiming himself the independent ruler of the southern regions. Such, at least, was the course actually followed by Chao T'o, who, on the final extinction of the last vestiges of the Ts'in dynasty, and the establishment of the house of Han on the ruins of the contending factions in northern China, declared himself, about the year B. C. 206, Sovereign Prince of Nan Yüeh, and rapidly extended his sway over the region lying westward and southward, which had been designated the province of Kwei-lin (part of the modern Kwangtung and Kwangsi). Reigning over these immense possessions, Chao T'o gradually extended the germs of order and civilization from the mountains to the sea, and on repeated occasions was visited by ambassadors from the founder of the Han dynasty and his successors, whose nominal sovereignty he was induced to acknowledge. On the decease of Chao T'o, in B. C. 137, his grandson succeeded to the throne of Yüeh, but was not long permitted to maintain the position of virtual independence which had been bequeathed to him. As the house of Han grew firmer in its grasp of the sovereignty in northern China, its demands upon the South became gradually more imperious, and

hostilities at length broke out between the Empire and its feudatory, which resulted in the subjugation of the principality of Nan Yüeh, and its incorporation for the second time among the provinces of China.

Up to this epoch, as may be gathered from the indications afforded by the histories of the Han dynasty, all beyond the more central portions of what is now known as Kwangtung was virtually a *terra incognita* to the Chinese, and the existence of such an island as that of Hainan was probably known only, if at all, by vague report from the occupants of the promontory which juts out from the mainland in an oblong projection and forms the peninsula of Seu Wên, immediately facing the northern shores of Hainan. At length, the progress of events necessitated the despatch of considerable armaments from North-China for the complete reduction of the southern territories. The general Lu Po-teh was despatched in B. C. 111, with the coöperation of three auxiliary columns, crossing the mountains at as many different points, to suppress a rebellion which had broken out in Nan Yüeh, under the instigation of Lü Kia, the minister there serving the descendant of Chao T'o in the governorship of the province. Having completed the work of subjugation, the Chinese army crossed over from the peninsula of Seu Wên to achieve a final triumph, and took possession of the Great Island lying opposite to its southern shore. This act of annexation to the dominions of the Emperor Wu Ti took place in B. C. 110, and in this year we commence for the first time to tread on firm historical ground with reference to the island of Hainan. The principality of Nan Yüeh and the adjacent territories were now apportioned under nine divisions, called *Kiün*, or Prefectures,* of which the following is a recapitulation, viz: Nan-hai, Ts'ang-wu, Kwei-lin (comprising the greater portion of the modern Kwangtung and Kwangsi), Ho-p'u (south-western Kwangtung), Kiao-che, Kiu-chên, Jih-nan (the modern Tonquin and part of An-nan), and lastly Chu-yai and Tan-urh, which latter divisions comprised the area of the newly conquered insular dependency.

Of the condition of Hainan when first invaded by the armies of Lu Po-teh, no contemporary account has been handed down, and all that can be gathered is that the island was found to be in the

* The limits of the ancient *Kiün* differed widely in extent, and in some cases far exceeded those of the modern "prefecture," but this term is for distinction's sake preserved as the equivalent of *Kiün*.

possession of savage aborigines, dwelling in the depths of forests which then, as now, covered the whole interior, and calling themselves Li 黎, as their descendants at this day are still entitled. That this designation originated with the natives themselves may be inferred from the uncertain etymology of the Chinese character which is employed to represent the sound. During the Han dynasty, the character used was that signifying "base," "low," or "uncultivated;" but this in process of time became exchanged for another character bearing the same sound, and used in certain combinations (*li shu, li min,* &c.) to designate the bulk of the people of China.* Of the condition of the aborigines at the period of the conquest, the only indications that have been preserved are those afforded by the names bestowed on the territorial divisions of the island. The newly acquired possession was divided by the Chinese into two unequal portions by means of a line drawn diagonally from N.W. to S.E., the interior range of mountains forming apparently the guiding principle of this demarcation. The southern and larger half, including those portions which are even at present the wildest and least accessible, and which consequently include the principal centres of the aboriginal population, was entitled the Prefecture of Tan-urh 儋耳郡 (*lit.* Drooping Ear), and the etymology of this title is referred to the fact that the "King" of the native tribes was distinguished by ears the lobes of which were drawn down to such an immoderate length that they touched his shoulders. From this it may be inferred that the authority of one supreme chief was acknowledged by at least a large proportion of the aborigines. And that their customs were in some degree similar to those which are characteristic at the present day of the mountain tribes of the adjacent continent. The northern and smaller division of the island was denominated

* The only legend which the Chinese have preserved in connection with the aborigines refers to the supposed manner of their origin. They relate that, at some unrecorded period, a serpent's egg, lying in the forest which then covered the whole of the still uninhabited island, was struck and split asunder by a thunderbolt, and gave birth hereupon to a female of the human race, who dwelt long alone upon the slopes of the mountain now designated the Li Mu Shan 黎母山 or Li Mother Mountain. After many years, a man belonging to one of the tribes of Cochin-China crossed to Hainan in search of scented woods, and encountered this solitary female denizen of the island, with whom he became united in the bonds of savage matrimony. From this primeval pair the tribes of the Li derive their descent. (See the *Kwang Yü Ki* or Imperial Topography, art. K'iung-chow).

the Prefecture of Chu-yai 珠崖郡, signifying the Pearl Shore, from which title we learn that the mussel-beds from which a valuable description of pearl was drawn, existing in the vicinity of the Straits of Hainan, and which continued to yield supplies of this treasure until the end of the fifteenth century, by which time they appear to have become quite exhausted,* were already known in the second century before Christ. It seems probable, indeed, that the conquest of Hainan was particularly coveted on this account, and to its value as a source of supply of pearls, totoise-shell, and scented woods for the use of the court the island probably owes the rapid colonization by means of which its shores became peopled by settlements of Chinese. The two prefectures, while subordinated to the government of Kiao-che, and ruled from the opposite mainland, were shortly divided into five *hien* or districts, each with its minor governor. Chu-yai was mapped out into the districts of Tai-mei, Ts'ze-pei, and Kow-chung, whilst to Tan-urh the districts of Chih-lai and Kiu-lung were allotted. In B. C. 82, however, at a time when the Chinese colonists appear to have given way in some measure before the attacks of the aborigines, the prefecture of Tan-urh ceased to exist, being merged in that of Chu-yai, and in B. C. 48 even this latter government was abrogated, and the whole island was for a time subordinated as a simple district, with the designation Chu-lu, to the prefecture of Ho-p'u on the opposite coast. This gradual shrinking of boundaries corresponds precisely with the period of weakness and anarchy which ushered in the downfall of the elder branch of the Han dynasty.

A new line of sovereigns—who became known in history as the dynasty of the Eastern Han—having been founded in A. D. 25, signs of returning vigour were not slow in displaying themselves upon the remotest frontiers of the Empire. In A. D. 43 the celebrated commander Ma Yüan effected the subjugation of Tonquin, where a temporary independence had been achieved; and the inhabitants of Hainan hereupon made voluntary tender of their renewed allegiance, the island having, it would seem, been allowed to lapse into an independent state for some time previously. The title of district of Chu-yai was now conferred upon it, but it was not until A. D. 67 that Chinese authority was

* See *Notes and Queries on China and Japan*, Vol. I, No. 1, Hongkong, 1867.

fully established upon the western coast. Very many and perplexing administrative changes of boundary and designation are recorded by the Chinese historians and topographers, who content themselves with the dry catalogue of successive dates and titles, without affording ground for so much as a surmise respecting the actual condition of the Chinese settlements which gradually formed, in the course of centuries, a chain of cities round the island. It is plain, notwithstanding this, that the dependency was kept in view as a valuable possession, and that even the most shortlived dynasties contrived to assert their sovereignty upon its shores, where an increasing immigrant population partly composed of traders and partly of military settlers, formed a fringe around the gloomy interior forests within which the aborigines had sullenly retreated.

The progressive growth of each district in the island is traced with minute assiduity by the native annalists, but it would be an unprofitable task to aim at transcribing, with Chinese fidelity, all the various changes of territorial nomenclature to which the literary caprice or superstitious notions of successive rulers subjected the local divisions of the island. Still, as an index to the gradual development of the Chinese population, as shown by the date of establishment of the various existing districts, and also as guide to the ancient topography, all traces of which have now disappeared from the map of Hainan, the following table, condensed from the historical synopsis forming part of the native gazetteer, may be found useful:—

TABULAR VIEW OF THE DISTRICTS AND DEPARTMENTS OF HAINAN.

Present Designation.	Date of Adoption	Remarks.
	A. D.	
瓊州府 K'iung-chow Fu	1370	Anciently Chu-yai and Tan-urh; Yai-chow, &c, &c. A. D. 631, K'iung-chow; 1278, K'iung-chow Lu; 1368, K'iung-chow.
瓊山縣 K'iung-shan Hien	627	B.C. 110, Tai-mei Hien. Subsequently called Chu-lu Hien. A.D. 523, Yai-chow. A. D. 600, Yen-lu Hien.

Present Designation.	Date of Adoption	Remarks.
	A. D.	
澄邁縣 Ch'êng-mai Hien	607	B.C.110, Kow-chung Hien
定安縣 Ting-ngan Hien	1291	Anciently, part of Tai-mei Hien.
文昌縣 Wên-ch'ang Hien	627	Anciently, Ts'ze-pei Hien.
會同縣 Hwei-t'ung Hien	1291	Anciently, part of Tai-mei Hien.
樂會縣 Lo-hwei Hien	660	Do. Do.
臨高縣 Lin-kao Hien	713	B.C.110, Tan-urh Kiün. A.D. 607, Pi-shen Hien. A.D. 622, Fu-lo Hien.
儋州 Tan Chow	622	B.C. 110, part of Tan-urh Kiün. A.D. 1235, Nan-ning Kiün.
昌化縣 Ch'ang-hwa Hien	607	B.C. 110, Chih-lai Hien.
萬州 Wan Chow	1368	B.C. 110, part of Tan-urh Kiün. A. D. 662, Wan-ngan Chow. A.D. 742, Wan-ngan Kiün.
陵水縣 Ling-shui Hien	622	B.C. 110, part of Tan-urh Kiün.
崖州 Yai Chow	1368	B.C. 110, part of Tan-urh Kiün; afterwards incorporated with Chu-yai Kiün, and later with Yai-chow. A.D. 1117, Ki-yang Kiün.
感恩縣 Kan-ngên Hien	607	B.C. 110, Kiu-lung Hien.

*** From the above it will be seen that the island of Hainan, first denominated by its present title of K'iung-chow Fu in A.D. 1370, now contains ten districts *(hien)* and three departments *(chow)* subject to the government of a prefect *(fu)*.

It was not until the seventh century of our era that the character *K'iung*, which was destined to become the distinguishing name of the island, found its way into use as a local designation. In A.D. 627, on the commencement of the reign of the second Emperor of the T'ang dynasty, a complete re-arrangement of the territorial divisions of Hainan took place, concurrently with the strengthening of the Chinese military stations throughout the island. The name of the district hitherto known as Yen-lu was changed to K'iung-shan, with reference to a conspicuous hill, lying some twenty miles to the South of the present capital town, which was celebrated for the brilliancy and whiteness of the rock of which it consists. The epithet *K'iung*, poetically applied to the most precious varieties of jade-stone, was attributed to this rock by some unremembered writer's fancy, and the name, thus given, was adopted at the period above-mentioned as the designation of the principal district in the island. Hainan being at the same time divided into four departments or *chow*, that one in which the district of K'iung-shan lay was further denominated K'iung Chow. This designation, after a multitude of administrative changes, came at length in A.D. 758 to be bestowed upon the entire island, and this title has been borne almost continuously since that period, although under varying circumstances as to the relative rank and dependence of its government. In 1370 the final stage was reached, when it became constituted on its present footing as a "Prefecture," with the name of K'iung-chow Fu, under the jurisdiction of the provincial government of Kwangtung.

The exceptional period during which the designation of K'iung-chow fell into disuse must be briefly referred to as it explains the name of HAINAN 海南 by which the island is most commonly known to Europeans. The Mongol conquest of China having been pushed forward to completion in A.D. 1278, and the last unhappy heir of the Sung dynasty having perished by drowning, clasped in the arms of his faithful minister and guardian, at the close of the decisive sea fight which took place near the western mouth of the Canton river, the Mongol commander-in-chief, Alihaya, at once despatched a force to demand the allegiance of K'iung-chow to the sovereignty of Kublay Khan. Some attempt at resistance was shewn by the Chinese governor, but the populace rose against him and delivered this officer with his subordinates into the hands of the Mongol invaders, by whom they were barbarously put to death. The island, thus subjugated, was reconstituted on a new

administrative footing, and was incorporated with the western portion of the present province of Kwang-tung in a newly erected satrapy under the designation of Hai-peh Hai-nan Tao—*i. e.* the Circuit or Intendantship North of the sea (Straits) and South of the sea. From this period arose the practice of referring to the island by the name of Hai-nan Tao, and hence has been derived the familiar name of Hainan, though this is less usually employed by the Chinese themselves than the modern official designation of K'iung-chow Fu.

The constitution of the island as a prefecture in 1370 doubtless marks the period when it first commenced to emerge from the mere status of a remote dependency into the settled condition of an integral portion of the Empire. From this period dates also the gradual disappearance of the specially military character of the subordinate cities, which under the T'ang and Sung dynasties had been established at intervals along the coast. The superior functions of government were discharged during the Ming dynasty by a deputy of the Provincial Supervisor of Kwang-tung, and the same system survived without disturbance the downfall of the Ming dynasty in the 17th century, enduring until leizure was found in the reign of the second Emperor of the present line to remodel the provincial system of administration. In the 13th year of the reign K'ang-hi—A.D. 1674—the deputy-supervisorship was at length exchanged for an office bearing the title of *Fên Siün Lui K'iung Tao*, or Divisional Intendant of Lui [chow Fu and] K'iung [chow Fu], from which appointment the existing office of Tao-t'ai, under the same title, derives its origin. The officer filling this post, and residing at K'iung-chow Fu, exercises a general jurisdiction over the whole of Hainan and the prefecture of Lui-chow on the mainland opposite. He has as his military colleague a *Tsung Ping* or Brigadier-general, with the title *K'iung-chow Chên-t'ai*, in command of all the garrisons in the island. This office was first created, in its present form, in 1653.

To return—after this digression—to the earlier history of the island, throughout the period of the T'ang dynasty and its immediate successors, K'iung-chow demanded notice from the rulers of China and finds mention on the part of the historians, principally with reference to the outbreaks periodically indulged in by the savages of the interior, who, though remaining quiet during peaceful times in the fastnesses of their impenetrable valleys, nevertheless took occasion whenever the Chinese garrisons were reduced or

became inefficient, to sally forth and commit devastations in the settled country, which they still regarded as their legitimate property. The Chinese, always supremely indifferent to whatever concerns the origin, conduct, or well-being of races foreign to their own, have been content to remain from first to last in almost total ignorance respecting the numbers, organization and objects of the savage tribes with whom they were brought on both sides most unwillingly in partial contact. The savages in general maintained with singular jealousy a rigid system of exclusion against all attempts at penetrating their forest homes. The slopes of the lofty Wu Che Shan, or Five Finger Mountains, which occupy the centre of the island, and the valleys formed along the spurs thrown out on every side by this range of hills, were known to be the abode of numerous tribes of Li, subsisting by the chase and by desultory agriculture,—fierce savages who boasted of their marvellous strength and endurance, whose hands were never empty of bow or spear, and who cherished an implacable resentment against the intruders upon their native soil. As, however, the propinquity of civilization had borne its usual fruits in instilling new wants into even this uncultured society, and as communication of one kind or another between the settlers and the aborigines was a matter of occasional necessity, there grew up in process of time an intermediate race, of aboriginal descent like the savages, yet, unlike them, acknowledging the supremacy of the Chinese and adopting in great measure their customs. This race, forming an inner fringe to the Chinese settlements on the coast, became known as the *Shu* Li, or civilized natives, in contradistinction to the *Shêng* Li or untamed savages of the interior. Although the descendants, in part, of the wild aborigines themselves, the Shu Li appear to have been not entirely of the same blood, but to have been brought from the mountain tribes of the opposite mainland, whence detachments were in early times recruited on the occasion of military expeditions, with the object, doubtless, of furnishing a means of communication with the indigenous race. In the course of centuries, the existing population of Shu Li has been formed, partly by descent from these early arrivals, and partly by successive amalgamations between this stock and the tribes of the interior. As their numbers increased, they became even greater objects of anxiety to the Chinese government than the Shêng Li themselves, and the chronicles of the island are filled with narratives of outbreaks on their part; but if the past may be judged by

the present there is ample reason for believing that they were in most cases goaded into insurrection by the rapacity and injustice of the governing officials.

It is easy to guess from the existing indications that Hainan was for many successive centuries the receptacle not only for turbulent classes of the Chinese population, who were frequently deported here in masses, but also the favorite *locus pœnitentiæ* for disgraced officials, who for real or alleged delinquencies were banished to what was rightly considered the most forlorn and pestilential region within the Imperial dominions. That from this system lawlessness among the people and corruption in the official body must probably ensue would be a consideration of little weight with the eunuchs or the literary pedants who alternately swayed the movements of the Chinese court; but the practice of employing the island for the purpose of receiving offenders doomed to banishment had one beneficial although quite unforeseen effect. The caprice of Chinese sovereigns, notably during the period of the T'ang and Sung dynasty from A. D. 618 to A. D. 1278 frequently placed the wisest and best among the servants of the State beneath the ban of Imperial displeasure, and over the head of honest councillors the mandate of disgrace was proverbially ever in suspense. To such a degree was the island of Yai-chow converted into the enforced abode of scholars and poets whose literary renown had ensured their advancement to high office without protecting them from what was often unmerited attack and overthrow, that a marked influence for good was exerted upon the mental development of the island population. A succession of banished scholars diffused among the rude colonists of Hainan an inclination toward study and a taste for literary refinement which are declared by Chinese historians to have exerted a marked influence upon the character of the people generally and upon the intellectual development of individual natives. Among the victims of misfortune who became in this manner temporary denizens of the island the most widely-celebrated was the poet-statesman Su She, 蘇軾 better known as Su Tung-po, 蘇東坡 who, during the troubled reign of Cheh Tsung of the Sung dynasty was degraded from his high position in the Ministry of State and relegated through various degrees of banishment to the last stage of disgrace in being directed to repair, in A. D. 1097, as Sub-Prefect to the district of Ch'ang-hwa, on the wild western coast of Hainan. Here the fallen Minister spent three years in dignified seclusion,

though always accessible to the visits of admiring students who were attracted by his fame to make pilgrimages to the humble cottage in which he dwelt, with his little son for his sole companion. The impression produced upon the poet's mind by the spectacle of his enforced abode, on first arriving upon its shores, is expressed in a quatrain which he composed on this occasion, and which is still preserved among the literary monuments relating to Hainan. This descriptive effusion may be translated as follows:—

THE ROCKS OF TAN-CHOW.

Rugged and steep, the wild cliffs upwards soar,
Like to no other hills the wide world o'er!
Wanderer! behold these rocks that line the way—
Cast hear superfluous* on Creation's day!

Throughout the period of Su Tung-po's residence in Hainan he mingled literary employment with the strict discharge of his humble official functions, and some of his most highly prized productions, including a celebrated rhapsody entitled "The Typhoon," are preserved among the printed records of the island history.

Differing widely from the famous poet whose banishment has invested the shores of Hainan with enduring interest in the eyes of Chinese scholars, another denizen of the Island has nevertheless contributed materially to its renown. Hwang Tao-p'o, or the wise woman Hwang—for it is one of the gentler sex to whom reference is made—was a native of Yai-chow at the close of the fourteenth century, and appears to have been versed in the art of cotton-spinning at a time when the cultivation of this staple was but just commencing to be spread in the northern provinces of China, under the auspices of the Mongol conquerors, by whom the plant was introduced upon the seabord from their homes in Kan-suh and Central Asia. Long previously to this period, however, cotton was undoubtedly grown in Cochin-China,† whence it found its way by slow degrees into Kwangtung, and its cultivation had doubtless been introduced at a comparatively early

* The allusion here is to the Chinese legend that when Nü Kwa, a fabulous hero of the primeval world, "melted rocks to repair the Heavens," a portion of the material thus employed was cast aside as unfit for use. To this the poet likens the rocks of Tan-chow.

† For an inquiry into the date and manner of the cotton cultivation into China see *Notes and Queries on China and Japan*, vol. 2, Nos. 4 and 5, 1868.

period into the southern regions of Hainan. Leaving her native island, Hwang Tao-p'o visited the rich alluvial plains of Central China, and taught her country-women dwelling upon the banks of the Yang-tsze River the use of the distaff and cotton-loom, for instruction in which, it is said, pupils flocked to her from all quarters. After her decease, a memorial temple was erected at K'iung-chow where sacrifices were annually offered, during a long series of years to her manes.

Among the natives of K'iung-chow who rose to literary eminence and political distinction (the one and the other being terms almost synonymous in the career of a Chinese aspirant for fame) the two individuals whose celebrity has been the highest and most enduring were both subjects of the Ming dynasty, and ornaments of consecutive ages. The elder, named K'iu Tsün, 邱濬 but better known (from his posthumous title) as K'iu Wên-chwang, was born A.D. 1420 of an immigrant family from the province of Fukien, who like many others under similar circumstances, had become settled in Hainan through the circumstance of their progenitor being placed in an official position in the island, from which, in those days of tardy locomotion, it was not easy to remove. After rising to the foremost rank among his contemporaries, both as a scholar and a statesman, K'iu Tsün died at the ripe age of seventy-six, bequeathing numerous works the reputation of which is still preëminent, in connection principally with subjects of classical and historical research. He had taken, moreover, a leading part by Imperial order in the continuation of the celebrated *T'ung Kien Kang Mu* or Synopsis of History, edited by Chu Hi during the Sung dynasty.

In the century following that thich was adorned by the talents and integrity of K'iu Tsün another brilliant name was added to the category of distinguished natives of Hainan. Hai Jui, 海瑞 or Hai Chung-kiai, as he became posthumously entitled, was the son of a minor official of K'iung-shan, who, dying while the future statesman was still a child, bequeathed his education to the care of an excellent mother, under whose training the foundation of future eminence was securely laid. Leaving the island at an early age, Hai Jui passed the superior examinations with credit at Peking, and rapidly rose in consequence to official distinction. The historians of the Ming dynasty have much to say concerning the firmness and plainness of speech with which Hai Jui was accustomed to offer just though unpalateable counsels to his Imperial

Master; and this upright discharge of duty led in 1566 to his being cast during ten months into rigorous confinement, of which, however, the despotic sovereign at length repented, reinstating Hai Jui, in true Asiatic fashion, in all his former dignities. He died in 1587.

Although severed at an early age from immediate connection with his native island, Hai Jui continued through life to bear its interests actively in mind, and in one of his addresses to the Throne, which has been preserved as at once a model of style and an example of political wisdom, he has bequeathed what affords at the present day a valuable insight into the condition of the island during the sixteenth century.

Dwelling on the disturbances and forays under which the inhabitants of the sea-coast continually suffer, and against which the isolated garrisons placed in each of the district cities were powerless to afford protection, he pictures, by the aid of a striking metaphor, the island as a body remote from all connection with the outside world, whose heart—the savages of the interior—sends forth a perpetual current of poison to paralyze its extremities; whilst at the same time, by way of vividly depicting the close propinquity with which the hostile races were associated, he exclaims that "the savages of the mountain-peak hear the cock's crow and the dog's bark in the homes of the Chinese householders. The salt and fish, the rice and clothing that the one consumes, the other supplies." In this indication of commercial intercourse may be traced, most probably, the secret of the continual outbreak of hostility on the part of the Li, both "savage" and "civilized." Following the irresistible bent of their nature toward chicanery and oppression, the trading classes of the Chinese in past ages as in the present doubtless played toward the unsophisticated wild men of K'iung-chow a similar part of trickery and injustice to that which was practised in recent times and under British sway by the Hindu usurers in their dealings with the simple mountaineers of the Santhal highlands in Bengal, which led to sanguinary reprisals and revolt barely fifteen years ago. Hai Jui recounts in his memorial no less than three risings of the aborigines in the space of exactly half a century, which were suppressed only by means of enormous outlay and extraordinary armaments in addition to the annual and costly expeditions which were rendered necessary by continual minor outbreaks. The three campaigns referred to were undertaken in 1501, 1541, and 1550, on each of which occasions, it is represented by Hai Jui, more than 100,000 troops

were brought over from the mainland, and hundreds of thousands of taels were expended.

Enterprises so vast as these, and carried on with so little beneficial result, appear the more astonishing when the statement of Hai Jui, that the mountain tract within which the fastnesses of the savages existed more than four hundred *li* (about 125 miles) in its longuest diameter, is taken into consideration. The remedy which Hai Jui suggested was simple and practical in the extreme —the very counsel, indeed, that a New Zealand minister in the present day might tender to his government, viz., the cutting of military roads across the savage territory and the establishment of posts to be occupied by military colonists at frequent intervals. He dwelt particularly upon what has since been enshrined in the history of Hainan as the "Proposal of the Cross Roads,"—a plan namely of intersecting the island by two main highways, cutting each other at right angles in the centre of the savage territory. With its usual supineness and obduracy, however, the Chinese government refused to inaugurate so active a measure of reform as that proposed for the complete subjugation of the island, and from the days of Hai Jui to the present time the interior of Hainan has remained a *terra incognita* abandoned exclusively to its savage denizens.

The only instance which history records of any conversion of the aborigines on an important scale from their independent mode of life took place in 1174, when, as the annals relate, one of the chiefs of the tribes inhabiting the central mountain region came over with 1820 of his followers, both male and female, who ranged themselves beneath the Chinese jurisdiction. The chief men among this party, to the number of eighty-two, were marched in procession with the governor of K'iung-chow to the principal temple of the city, where they cut notches in a stone and dipped their fingers in blood in ratification of their engagements to abandon the practices of rapine and disorder. Drawings of their persons and costume were hereupon prepared and forwarded to the Emperor.

It was not alone from the savages of the interior, however, that the Chinese settlements along the coast had attacks to fear. The chronicles of the island record perpetual forays upon the coast by the pirates or sea banditti who roamed for centuries almost unchecked along the entire sea-bord of China, and maintained in repeated instances a species of maritime Empire, with hostility to

the settled order of the mainland as its guiding principle and rapine as its industry and source of revenue. From the fifteenth century downwards to the beginning of the nineteenth, the China seas were never free from disturbances of this nature, and it is only since the growth of a great foreign shipping interest upon the coast, coupled with the changes introduced by steam navigation and the exertions of the British naval squadron in these waters, that piracy has slowly declined as a lucrative profession, and bids fair within the next few years to become altogether extinct. Its last feeble tokens of continued vitality are confined to petty undertakings in the waters surrounding Hainan, where for three hundred years the fleets of the freebooters were accustomed to sail in all the pride of conscious dominion. To such an extent did the evil flourish during the 17th century, in particular, that all navigation on the open sea between the East Coast of Hainan and the mouths of the Canton River was interdicted, with the view of depriving the sea-rovers of their only object—plunder; and the traffic between K'iung Chow and the mainland was forced to confine itself to the track across the narrow straits which divide the island from the jutting peninsula of Seu Wên on the North. This entailed the disadvantage of a long journey by land, extending at the quickest over fully one month, between the island and the provincial capital, hampering trade and rendering travel a wearisome undertaking; but the pirates were nothing daunted, and transferred their ravages from the ocean to the shore, landing in force time after time, and sacking the towns on the northern and eastern coarts of Hainan in dispite of the Imperial garrisons.

It was only in 1684, the year after the destruction of the pirate-kingdom established in Formosa by the celebrated Chêng Che-lung (Kok-singa), that navigation along the West coast of Kwangtung was again permitted, and the embargo hitherto laid on the exit of shipping from the ports of Hainan was once more allowed.

Since this period, as already indicated above, piracy has nevertheless flourished in a greater or less degree in the vicinity of Hainan, and squadrons of pirate-junks were accustomed until the most recent times to sail northward annually with the summer monsoon, and commit enormous depredations between the Straits of Hainan and the entrance to the Formosa Channel. Between 1842 and 1860 more than one desperate encounter took place between these fleets and vessels of the British navy, which were despatched from time to time on cruises against these public

enemies; but it was not until after the complete establishment of friendly retations with the Chinese government and the arrival at the British naval headquarters in Hongkong of steam gun-boats suitable for navigation in shallow waters that effective measures could be adopted for parmanently clearing the seas of freebooting squadrons. From 1863 onwards, unintermitting labours devolved upon vessels of this class in the good work of exterminating the remaining vestiges of piracy on the southern coastline of China; and a quick succession of deeds of skill and daring, crowned almost uniformly with marvellous good fortune, attended the efforts of the diminutive cruisers *Opossum*, *Bouncer*, and *Algerine*, whose names, with those of their gallant commanders, have earned a wide celebrity through the exploits achieved in this laborious but exciting service. Since 1868, the Chinese provincial government of Kwangtung has been placed in possession of steam gun-boats of its own, built and equipped in England, and officered by Englishmen, but manned by Chinese sailors, and to these will henceforth be committed the task of finally completing the suppression of piracy and of preventing its revival in future. They have already performed gallant and effective service in the waters of Hainan.

Reference has been made above to the local chronicles or "Gazetteer" of K'iung-chow, and for much of the information upon which this historical sketch is based acknowledgement must be given to its pages. The work in question is the *Che* or universal description of the prefecture, embracing a vast variety of details, and is one of the class of compilations such as exist in behalf of every district, prefecture, and province throughout the Chinese Empire. The growth of this most useful department of literature may be traced to a period almost coeval with the invention of printing in China, and dates therefore from about the 11th century of our era. at the present day, these works afford an invaluable mass of material with respect to the topography, history, flora, fauna and natural productions, the celebrated characters, literary achievements, statistics, antiquities, chronology, and even legends appertaining to each of the sections into which the Empire is divided for administrative purposes. The Prefectural Gazetteers, holding an intermediate rank between the comparatively restricted descriptions of mere districts, and the necessarily bulky but less detailed works devoted to entire provinces, are the most eligible sources of information to which an inquirer can have recourse. A work of this description is the gazetteer of K'iung-chow Fu,

which occupies seventeen volumes. Like all existing compilations of its kind, it is the production of a number of hands, coöperating under the direction of the local governor for the time being. The first gazetteer was compiled under the Ming dynasty, some three centuries ago; and several revisions have taken place during the ensuing period. The present edition dates from 1841, and is a favorable specimen of its class.

From the chronicles of remarkable occurences to which one volume of the Gazetteer is devoted, numerous extracts of interest with regard to the condition of Hainan may be selected, amid a mass of comparatively unimportant details. Thus we learn, in addition to notices of risings on the part of the aborigines and forays of the sea-banditti which have already been noticed above, that the naval armaments of the Japanese, during their protracted hostilities with the Ming Emperors, extended on more than one occasion their predatory cruises as far south as the coast of Hainan, where, in 1411, they landed in force and captured the outworks of the district city of Ch'ang-hwa. As records of the occurrence of natural phenomena, moreover, the Chinese gazetteers have always an especial value; and the chronicles of K'iung-chow Fu contain a vast collection of 73 memorabilia under this head. The destructive force of typhoons in the southern portion of the China seas is one of the most familiar facts in meteorology, but the liability of Hainan to suffer from earthquakes is not so generally known. Catastrophes of this nature, however, are recorded in the gazetteer as of frequent occurrence. The first earthquake of which mention is made is stated as having taken place in 1523, when the district of Lo-hwei is said to have been disturbed for days by tremblings of the soil, accompanied by a noise as of peals of thunder, causing great consternation among the inhabitants. In the following year shocks were felt simultaneously at Tan-chow, Hwei-t'ung, and Lo-hwei (the axis of the disburbance crossing the island, therefore, in the direction of N. W. to S. E.) The mountain known as the Yeo-t'an Shan subsided vertically in depth to more than 100 feet. This was during the third moon of the year, or about the month of April according to our present reckoning; and in the autumn the most appalling and destructive typhoon on record up to that time burst over the island.

In 1526 an earthquake again occurred at Tan-chow. In 1605 the whole island was visited with shocks lasting several days and entailing a loss of several thousand lives. Gulfs opened and closed,

and numbers of dwellings were thrown down. In 1652, Ch'êng-mai, in the N.W. angle of the island; experienced a shock; and in 1677, 1681, and 1684, the capital city was similarly disturbed. During the winter of 1684 the extraordinary phenomenon of a fall of snow took place, leading to the destruction through cold of the greater part of the cocoa-nut trees with which the shores of the island were there, as now, densely over-grown. In 1702 another earthquake was felt at K'iung-chow; and in 1704 a shock occurred at Wên-ch'ang, some little distance further to the S.E. In 1725 the centre of disturbance appears to have shifted to the extreme south of the island, Yai-chow being the sufferer in this year; and in 1742 typhoons are again found associated with an earthquake in the work of destruction. In the seventh moon of this year three typhoons passed over the island, doing an enormous amount of damage; and in the eleventh moon an earthquake made itself felt. During the last hundred years to which the chronicle extends, a great number of shocks are recorded, but the greater number may be passed over as undeserving special mention. To come down to the record of calamities within living memory, we find that in 1816 Yai-chow was again the scene of an earthquake, and in 1817 was visited by a disastrous typhoon. In the following year a terrific typhoon was experienced throughout the island, attended as usual by fearful inundations, which swept away vast numbers of human beings.* The year 1821 was rendered memorable by a pestilence which devastated the districts af K'iung-shan, Wan-chow, and Lo-hwei (on the east coast). This may very possibly have had some connection with the outbreak of cholera which swept along the coast of China in more northerly latitudes at about the same period, previously to the first advance of the disease in the direction of Europe. In 1822 another earthquake took place

* The storm-wave which adds to the destruction wrought by revolving hurricanes is a phenomenon well known to scientific observers, and is referred to in the following terms in Buchan's *Handy Book of Meteorology*, Edinburgh, 1868:—"Owing to the diminished pressure of the air at the centre compared with what prevailed at the outset of the storm [viz. the Bahama hurricane of October, 1866], the difference being fully two inches of mercury, the level of the sea at the centre would be raised about three feet, being sustained at that height by the greater pressure all round." Similarly, in the great typhoon of July, 1862, which swept over Canton and a wide extent of the adjacent country, the sudden rise of the tide at places forty or fifty miles from the sea was estimated at a height of from three to five feet above the ordinary river-level, leading to an immense destruction of life and property.

at Wan-chow, followed in the beginning of 1823 by devastating hail-storms, the stones varying in size, it is related, from a bushel measure to the size of the fist. The melting of these masses of ice caused floods, and the rice-fields were laid under water to an enormous extent. The consequence of this was a widespread famine in the ensuing year; and the disastrous results of this affliction were intensified by an invasion of locusts, which destroyed the small remnants of a crop that had been looked upon as the sole reliance of the people. The corpses of those who perished by starvation lay piled in heaps upon the roads, and an enormous exodus of the population took place toward the mainland.

In 1834 another earthquake shook the districts of K'iung-shan and Wên-ch'ang, with the record of which the dismal category of these phenomena ends.

The same methodical compilation which has supplied the means of preparing the above account of remarkable occurrences in Hainan, furnishes also some particulars with reference to the population, revenue, and extent of land in cultivation. It is alleged that the total area of all land subject to taxation, as being held under government title-deeds, and in cultivation either as arable land or garden-ground, amounted in 1840 to two million nine hundred and ninety-eight thousand two hundred and twenty-seven *mow*, which, at the rate of six *mow* to the English acre, according to the usual scale of computation, gives an extent of 499,704½ acres.

The total revenue collected by the Prefect of K'iung-chow Fu at the same period from all sources, such as land tax, commuted capitation tax, salt monopoly, local customs, &c., is stated as amounting to Taels 88,935, *plus* the commuted value of 16,282 *shih* of rice. Calculating this latter source of income according to the rates of levy prevailing elsewhere, the amount yielded would be about Taels 73,269; and the two sources of revenue combined would make a total sum of Taels 162,204, equivalent to about 216,000 dollars. It is, probable, however, that not more than one-third of the amount collected under the head of rice levy would appear in the public accounts, as the bulk of this source of income is, with the tacit sanction of the government, withheld by the district magistrates for the defrayal of the expenses of administration.

The military force constituting the resident garrisons of the thirteen walled cities of the island amounts to a total of 5,370 men, with 130 officers.

The population of Hainan is naturally of a very miscellaneous character by descent, owing its origin to the successive waves of immigration introduced in past ages on the conquest and reconquests of the island, changes of dynasty, involving wholesale banishments from the mainland, and the continual influx of military and commercial settlers from various parts of the Empire. The settlements originally founded under the Han dynasty, subsequently to the annexation of the island in B.C. 110, are stated to have amounted in all to 23,000 families—a large number, but not excessive when viewed with reference to the magnificent scale upon which removals of population were ordered and effected in that age. During the ensuing centuries, immigration took place indiscriminately from various parts of the Empire; and in A.D. 1300 the population was found to amount to 166,257 souls. In 1370 an enumeration took place, giving as its result 68,500 households, and 291,030 souls. In 1617 the population was found to have fallen to 250,524; but a steady increase appears to have continued since the middle of 17th century, and in 1835 the total number of inhabitants was returned by the official census at (in round numbers) 1,350,000 souls. It is necessary to bear in mind, however, that all Chinese statistics, even where not intentionally fallacious, are exceedingly loose and generally untrustworthy; more especially, owing to causes upon which it is not needful to expatiate here, in relation to questions of population and revenue.

In the above pages, the history and gradual development of Hainan have been traced in accordance with the information to be gathered from Chinese sources or from contemporary experience. The existing condition of the island has during the last few years been investigated on the spot by one of Her Majesty's Consuls (Mr. Robert Swinhoe); and as regards the future prospects of this tropical nook, it remains for coming years to lift the veil of uncertainty, and to decide whether so rich and productive but neglected an expanse of territory is to continue in its present state of abannonment and decay or to become a valuable contributor to the world's wealth by means of the admission of European enterprize and commercial relations.

ARTICLE II.

THE ABORIGINES OF HAINAN.*

By ROBERT SWINHOE,
F. R. G. S., F. Z. S.,
H. B. M.'s Consul at Ningpo.



"THE central country (of Hainan)," observes Du Halde, "is inhabited by a free people who have not yet been conquered, and who do not recognise the authority of the mandarins. Obliged to abandon to the Chinese their plains and their fields they have retreated into the mountains in the centre of the island, where they are under cover from all insult on the part of their aggressors."

"These islanders now scarcely ever appear except when caprice or the recollection of their former liberty impels them to make an irruption into the neighbouring Chinese villages. They have sometimes attempted to surprise the latter, but they are so badly disciplined, and have so little courage that fifty Chinese, although bad soldiers enough, can put to flight a thousand of them; it is enough for the Chinese to show themselves to put them to rout.

"There are however some of these islanders, who, more docile, have rendered themselves tributary to the Chinese and are allowed to occupy entire villages in the plains holding no communication with their brethren of the mountains.

"Many others serve the Chinese, tend their flocks, till their fields, and are subject to the common statute labour ordered by the governors of the different places. They may be seen scattered throughout the country on the east and north of the island. Generally speaking they are very deformed, of a very small stature and of a reddish colour.

"The men and women wear their hair pressed through a ring on the forehead, and on it a small hat of straw or rattan, whence hang two strings which they tie under the chin.

* Read before the Society on 25th March, 1872.

"Their clothing consists of a bit of cotton-cloth, black or deep blue, which covers them from the waist to the knees; the women are clothed with a kind of chemisette of the same staff, and are further distinguished by blue rays which they make with indigo from the eyes down the face. Both sexes wear earrings of gold and of silver made in form of a pear, and very well wrought.

"Their arms are the bow and arrow, which they do not use with much address, and a kind of cutlass which they carry in a small pannier attached behind them to the waist. This is the only instrument which serves them to do their carpentering work and to cut the wood and the bush when they traverse the forests."

The men and women here described are of course the more docile islanders tributary to the Chinese, and it will be found that the note of their appearance and their dress agrees very well with what we observed at Lingshuy and Yulinkan, and will in a general way probably apply to all the Le of the island, but in our short acquaintance with them we noticed that each of the four tribes we came across had peculiarities of their own not only in dress, but also in personal appearance and speech. The Le encountered at Taiping in the mountains of the interior, who call themselves La, are a short, sturdy, light-coloured race wearing the hair in a knob on the crown and in a knot behind, the whole turbaned with a cloth, their dress consisting simply of a front and a hind apron of blue or black cotton cloth, the two colours usually worn, though they sometimes have jackets of unbleached white fastened to the waist by a string and reaching to the knees; the two aprons overlap on the left hip, but expose the right to avoid interfering with the drawing of the bowstring in the hunt. All their other accessories of dress are borrowed from the Chinese. In their easy apron costume they agree with the inhabitants of the southern end of Formosa.

The Seao Le of Lingshuy and Yulinkan are smaller and darker than the former, do the hair in a similar way, and also cover it with a turban-cloth, but their aprons are broader, overlapping on both hips and are usually banded and not whole-coloured. All of them wore behind the basket containing a knife, and some of the better-off people that we met at Yulinkan had the pear-shaped silver earrings.

The K'lai of Nychow were large, big-boned, dark men much more like Singapore Malays, and dressed their hair differently. Their costume was of the simplest, consisting merely of a rag between the legs like that indulged in by the coolies in India.

Of the Lao of Tanchow we only saw one individual, and he was a tall, lightish coloured, effeminate looking man, but his mode of dressing the hair was after the fashion in vogue at Nychow.

The women of all the tribes, we were told, tattoo their faces when married, part their hair in the middle, and arrange it in a large knot behind, or wear it loose down the back. They dress like the Formosan women with a short Malay "sarang" or cloth extending from the waist to the knees, or lower, and well overlapping towards one side; over their shoulders they wear a kind of jacket buttoning in front and reaching to the waist, in style like that the Chinese country-women wear, and probably borrowed from them.

We have not sufficient material to treat further on the relative differences of the various tribes of Le, but enough has been said to show that on very slight acquaintance such characters can easily be detected, and the few notes that we shall be able to add on their language will prove that that also varies. But it will be seen that the variations can only be considered dialectic, and not greater than what ordinarily prevails among a people of the same race scattered over a mountainous country. In Formosa on the contrary contiguous tribes have distinct languages requiring the medium of an interpreter, which seems to indicate either distinct races of men, or great lapse of time between the periods of colonisation of the same race, isolation having had sufficient season to work a thorough change.

I remarked the shy expression and apparent timidity of the Le people we came across, betraying a desire to pass unnoticed or to escape observation. This would seem to agree with what Du Halde says of their want of courage in facing the Chinese soldiers. At Lingshuy the Chinese made a "bogie" of us and the Le ran away frightened while their bullies hooted after them; and the mountaineers at Lingmun trembled before the mandarin. How superior in this respect are the well-formed inhabitants of the hills of Formosa! It cannot then be from fear of the ugly Le that the Chinese have not overrun the island. It is of the pestilential atmosphere of the jungly regions. The Chinese are usually considered ubiquitous in their nature; they scramble into Russian Tartary and face the severest cold; they deluge the Straits and work bare-backed in the hottest sun; but one place seems to baulk them and that in their own possessions; they cannot stand before the malaria of the jungly mountains of Hainan. So far Providence seems to have provided for the

protection of the Malay race in this large island, and the usurpers notwithstanding their long occupation still leave the richest portions of the country to the enjoyment of the earlier occupants, and have themselves to resort to emigration to provide for their surplus population.

A legend on the origin of the Le was related to me by a mandarin in Hainan which agrees with what Mr. Taintor has given in his report.* It was as follows: an egg was deposited by the clouds on the highest range of mountains, which produced a beautiful woman who for long was the sole occupant of the island. At length a solitary Cochin-Chinese wandered to the island, and meeting this then somewhat ancient sylph a union was contracted, and they became the parents of a numerous progeny, the ancestors of the present Le. She was hailed as the Le-moo or Mother of the Le, and the mountain range, whence she sprang into existence, still bears her name. Another story was that the egg hatched a dog which a Princess from Cochin-China fell in love with and wedded with similar result.

The Chinese vaguely divide the Le of Hainan, as they do the Fan of Formosa, into Seng and Shuh, or Raw and Ripe, the former word referring to the independent tribes and the latter to those that bear their yoke. But amongst the latter are also included the different parties of *Meao* that have from time to time emigrated from Kwangse and western Kwangtung and taken possession of some of the lower hills. These people are closely connected with the native Le, have a somewhat similar language, are good cultivators of the land, and seem by temporisation to fraternise well with both natives and Chinese. In the neighbourhood of the *Seng Le* they observe the customs of the Seng Le, and in the neighbourhood of the Chinese settlers they adopt Chinese habits.† They are analogous to the Pepolang of the lower hills of Formosa, who appear to be a different people to the inhabitants of the mountains, but maintain their position by a similar habit of temporising. I met a Meao at Lingmun, and shall have more to say of them anon; at present let us confine our attention to the Le. The Le that I met in the market at Lingmun were of the independent tribes and the Chinese called them Seng Le. Those met at Lingshuy and Yulinkan were called Seao Le. At Nychow the

* Report on Trade at the Treaty Ports, 1867, Shanghai, p. 16.

† The Aborigines of Hainan. E. C. Bowra. N. & Q., vol. I, p. 84.

natives were often referred to as the Shuh Le, but they differed in no respect from the wild tribes of their neighbourhood except that their headmen acknowledged a kind of responsibility to the Chinese authorities which enabled the people of their tribe to seek labour in the Chinese towns; their dress, manner and customs were those of their ancestors and of their independent brethren with whom they were in close relationship, and from whom they sought and gained assistance in their struggle against Chinese oppression. The term Shuh Le strictly applies to those tribes that have entirely submitted to the Chinese by shaving and adopting the queue, and, as Du Halde states, hold no communication with the wild tribes. This term further, by some confused notion, quite Chinese, that all barbarians are the same and to be classed under one designation, is extended to the Meao settlers. The village that I visited near Lingmun was composed of Shuh Le properly so-called. Like the Shuh Fan of Formosa the men are compelled to shave and dress as other Chinese subjects; the women can dress as they please. When both sexes throw aside their native costume and adopt Chinese dress and customs, they become what the Chinese vauntingly call *lang* or *jin*, the word they apply to themselves, and which we might translate "true men."

I will now give what information I have been able to gather from Chinese sources concerning the Le. In a work picked up at Peking entitled "Pictures of People tributary to China" published by order of the Emperor in the 16th year of the Reign Kienlung, and containing representations of peoples of many of the States of Europe including England, (the Englishman is drawn in the dress of the George period with a grog bottle in his hand) in the 4th part are figured a Le man and a Le woman, and on the pages facing the sketches the following account is given. "These people were called Le (radical *jin*=man, phonetic Le=Ch: mile) in the How Han dynasty, but as hill-ranges are ordinarily termed Le (the character at present used), and these people live among such, the second Le has been wrongly substituted for the first. They are scattered about in the Kiungchow Prefecture and are found in all the caves of the five-fingered mountains (the highest peak in Hainan). They are of a fierce and perverse disposition and constantly fall out among themselves and kill one another. From the Tang to the present dynasty they have been inconstant as to their independence or submission. In the 38th year of Kanghe the general Tang Kwang-yao marched against them and

subdued them into submission, thus establishing tranquillity. In the 7th year of Yungching all the Le from the different caves desired to enter the Empire and learn to become good subjects. The males twist the hair into a knot in front, and bind the head with red cloth, hanging copper rings from their ears. They wear short coats reaching to the knees, and simply screen the lower body with a flap of cloth before and another behind. They live by the chase, the plough, and wood-cutting.

"The Le females twist the hair into a knot behind, covering their heads with a blue kerchief. On marrying they prick with a needle on their faces patterns of butterflies, moths, flowers, and grasses. They wear embroidered *kepei* (frocks) and bind round them flowered *keëtung*. The latter is like a Chinese petticoat, but is stitched together all round and reaches just below the knees.

"Their custom is not to cry when their parents die, but to swallow raw meat, their mode of expressing great grief."

I have a pictorial map of Hainan marking the chief towns and places in the island, and illustrating with small painted drawings all over its surface the botany, zoology, and avocations of the natives. The latter are shewn by small groups of figures in apt attitudes, and a few lines by the side of each explains its meaning. A translation of these is worth introducing.

1. "Chinese Hainan contains altogether 400 rivers, and 13 districts extending to the mountains. The mountains the gracious Emperor allows the Le to occupy."

2. "The Le people delight in practising with the spear at over a hundred paces distance. They use it for taking birds and beasts. In throwing it they do not fall short of the mark. Their bows are made of hard wood with the bowstring of bamboo. Their arrows are tipped with iron heads and have no feather. Each December they take the bow and go out in numbers to the chase; nine out of every ten of their shots tell."

3. "The Le in fishing are not acquainted with the net, the basket, the seine, or other devices. They shoot fish with wooden bow and arrow. To preserve these, salt is a great necessity amongst them, and this, Chinese pedlars supply making cent. per cent. profit out of it."

4. "Among the Le seed is not sown until the rains come. When sufficient rain has fallen they let loose their cattle in herds to trample the water and soil into thick mud, on which they scatter their grain. They gather in season, and it may be said their crops are exceedingly good."

5. "When the paddy is ripe they gather it, but they do not know the right way. Taking the stalks together with the hand they pluck them up, tie into sheaves, and carry home. Amongst the paddy there is a fragrant kind with grains large and firm, which when boiled scents the whole house. Though the border Chinese eat it, it is not in favour owing to its tendency to breed fever and ague."

6. "The Le have no stone mortars among them; they pound their rice in wooden ones instead. Three or four men pound in the same mortar."

7. "The houses of the Le are long and high and in form like a boat; doors open on the right and left. In the middle they have two stories. They live in the upper story ascending by a ladder; in the lower room they keep their pigs."

8. "The Le do not understand the art of divination. If they have a stroke of good or bad luck their mode is to kill a fowl and learn by examining its feet the sorrow or happiness to come."

9. "The Le people cannot read and write and do not understand communicating by letter; but they notch an arrow to convey an idea, and the recipient of the arrow understands the idea conveyed."

10. "The Le ladies are not versed in the art of spinning and wearing the silk of the mulberry worm. Their country only produces a kind of cotton-tree which flowers in spring and ripens in summer. The Le ladies gather the seeds and take out the cotton, and with the hand and foot twist it into thread. They dye the thread blue and weave it into cloth from which the *kepei* is made. This is worn like the Chinese *kao-ke* (jacket)."

11. "The Le give no feasts or entertainments except in the 6th and 12th moons of the year, and on occasions of weddings, when they slay a cock and lead forth the whole village. When all have eaten and drunk they beat drums and bells for amusement the remainder of the day."

12. "In the fine evenings of spring the young men and maidens of 16 and 17 sing and play with each other, and make love. They make their own matches, the fathers and mothers not interfering in the choice; but when all is fixed the parents arrange the marriage-presents, and unite the lovers according to Le rites."

13. "After the exchange of betrothal presents comes the marriage. The bridegroom follows the middle-man to the bride's door. Her parents order her to cover her head and unloosen her

dress and go out to him. The bridegroom takes the bride on his back and carries her to his house. Both the rich and the poor give *kepei* and wine as dowries."

14. "Cattle are most esteemed as gifts of betrothal, but wine, *kepei*, and other things help to make up. The bridegroom's family present the face-pattern drawn like insects or plants, and a copy of this is tattooed on the face of the young lady. An embroidered face on a lady shows that she is either a wife or a fiancée, and is therefore bound to be true to the lord of her choice."

15. "The Le are of a violent temper, but of a straightforward disposition. Men of the same tribe, if put out by a word, seize spears or arrows and rush at one another, but their ladies step between and by a soothing speech separate the combatants."

To complete as far as within my reach this Chinese sketch of the manners and customs of the Le, I will extract a few notices from Mr. Bowra's translation from the Kiungshan Heen Gazetteer (op. cit.)

"The accomplishment of revenge is a sacred custom, and for the murder of a father, grandfather, or friend, vengeance will be sought for several generations.

"Their houses are built of knitted grass in the form of an inverted basin; people living above and cattle and pigs below. Their garments consist of a cotton coverlid with a hole in the centre and without any sleeves; this is put on over the head, and allowed to fall down in front and behind." "On their heads they wear wraps of embroidered cloth, and carry six-cornered hats made of rattan."

"A log of wood is hollowed out for a coffin, and at the time of the funeral a person leads the way and throws an egg upon the ground; the place where the egg falls unbroken is considered as of good omen."

Of the religious practices of the Le I can find no Chinese record. Some Chinese in Hainan told me that the Le feared the evil spirits and tried to propitiate them, others said they had no temples or idols and judged from that that they had no fear of heaven. They certainly have not the head-worshipping system of the Formosans with protecting Priestesses, but probably sacrifice to the evil-powers as do the Meao that have settled among them, and with whom in many of their habits they seem intimately connected.

I have already written what little I learnt of the Meao in Hainan from the individual I met at Lingmun. The mandarins called

them Meao Le and said that they were mostly modern arrivals from the Meao strongholds in the provinces of Kwangse and Kweichow, but that parties of them had been encouraged to cross and settle in Hainan from the earliest times to act as buffers between the Chinese and the mountaineers. Mr. Bowra's translation (op. cit.) seems to confirm this, and to suggest that the Le of Hainan and the so-called Meao of the continent are the same race. "The Shuh Le," it says, "are all originally settlers from the departments of (here follow names of places on the continent where the Meao are known to exist), and the names Wang and Foo are of frequent occurrence. The ancestors of these people attracted by the fertility of the land, conquered it and settled there. Villages and settlements sprang up, and the first settler became the head of the village, except in the case of several entering at the same time, when the strongest became leader.

"On the death of the father the son succeeds, and on the death of the husband the widow becomes master.

"There are some settlements which pay taxes and render service to the state, and there are others which pay taxes but render no service.

"Both by disposition and by custom these Le are fierce and intractable. Regardless of relationship or consanguinity a single word will cause them to seize bow and spear and to engage in fight; but on interference of their wives the affair is dropped. They have no positions of honour in sitting down. When sick they sacrifice oxen to the evil spirits, and on burial of a corpse they sacrifice cattle and invite their friends as if to a feast. In the spring time they observe a great festival when men and women from adjoining settlements attire themselves gaily, and hand in hand and shoulder to shoulder stroll about together and sing songs in turn. This they call acting. Many are married at this period; the parents not having any power of objection. In marriage no avoidance of similarity of name is observed." These customs are very similar to those said to prevail among the mountain Le, and if equally true of the Meao, would certainly indicate identity of race. The mode of dancing however is precisely that in practice among the Pepo of Formosa. A broken circle is formed by a line of men and women, the men occupying one half, the women the other; the hands of each are crossed in front and the left hand clasped in the right hand of the person on the right, and the right hand in the left of the one on the other

side. The men lead the song and the women follow, and as they sing the circle advances two steps contracting towards the centre and then retires two steps expanding. A man stands in the middle with a bowl of wine and supplies each of the merry-makers in turn, and the mirth increases in consequence until it gets very boisterous. On moonlight nights in spring the *Shuh Fan* or Pepo continue this game till the small hours of the morning. But we have heard of no emigration of mountain tribes from China to Formosa; indeed most people are under the impression that Formosa has been peopled from the Philippines, and the *R* abounding language of the Pepo and other tribes of Formosans shows no approach to that of the Le. The similarity in such practices may simply be an accidental coincidence. But of the consanguinity of the Le with the Meao, language adds evidence, as I shall now attempt to show.

* *List of words and sentences of the language spoken by the Lakia or Central Le, obtained from an old woman of a family lately settled near the Chinese at Lingmun.*

NUMERALS.

1	E van†	13	La poo tsoo
2	Tow van	14	La poon t'so
3	Tsoo van	15	La poon pĭh
4	T'so	16	La poon tum
5	Pah	17	La poon t'o
6	Tūm	18	La poon ho
7	T'o	19	La poon fŏŭt
8	Ho	20	Tow poom
9	Fan	21	Tow poonü
10	La poom	100	Lao van
11	La poo noo	1000	Long een
12	La poo clau		

Head	Foo-oo
Hand	Tam-o
Mouth	Pam
Eye	Oo-cha
Foot	K'ok
Nose	K'at
Father	Bah

* Read the native words with English pronunciation.

† Van=Mandarin "Ko" (ordinary numerative).

Mother	Pee
Elder brother	E-yong
Younger brother	Ho-ong
Elder sisters	K'ao
Younger sisters	Hoo-ong
Son	Tabo man
Daughter	Tabo paik'o
Woman	Pai-k'o
Man	Ha-ao
Man's house	Hao-po plung ao
Night	Ts'ap
Moon	Len-nān
Stars	Tap-lao
Morning	Len
Sun	Ts'a van
Sky	Lai-fa
Evening	Ko-fan
Earth	Fan
Grass	Kan
Water	Nam
Fire	Fei
Bird	Tat
Knife	Klew-ka
I	Hoon-hao. Ho
You	E-mow
He	Ye
She	Pūn
Eat rice	K'an ka
Drink water	O nam
Smoke tobacco	O ja
Pipe	Tâo ja
How old are you?	Mow-poo tălă-hoë po-né
Sixty years	Tum-fo tai
Have you eaten rice or no?	Mow-poo k'an-ka kălă chan
One bow	E vare vat
Two arrows	Tow p'oon teëk
To shoot with the bow	Chow
A tree	E-t'oo ŭn sai
A Sambur deer	E-lang lawy
Two Muntjac deer	Tow-lang lai
A bear	E-lang mooy
A leopard	E choo-ŭn kătăk hoŏm

Have you a father?	Bah moo-doo chau-an
I have	Doo ok tsao
I have no father	Bah vay-hay
You come here	Pĕhiny vo mü
This is good	Pĕhiny chin moo-ĕn
This is better	Pĕhiny chin kĕho clen
This is best	Pĕhiny clen
I see you well	Ho tanmow clen
I see him now	Vatney ho lai-mow
I saw him yesterday	Pailao ho laimow
I will see him to-morrow	Paiho ho laimow
This	Paihow
That	Pai-ney
Here	Kaihow
This is mine	Kaihow
Whose is this?	Kai-ao la
When did you come?	No poon-an ka poon-an
One year	E po
Two months	Tow nëän
One day	Vat ney
Two days	Tow-van ney
One tree	E-t'oo-ën sai
Many	Tai
Few	To
Bad	Tay-tuy
Good looking	Clen-lai
How far from here to there?	Hĕnah lai tao kwan
What is your name?	Mo p'ay ng moo
Good friends	Clen-mo ao-ong
To die	(Ao)* ts'ooy
No	Wy
Yes	Man
Yes or no?	Man kălă wy
Where did you come from?	Mow-hoon la poon

From these few words we find that like in Chinese the letter *R* is wanting as an initial consonant. In Japanese and in the Formosan languages on the contrary it plays a prominent part. The words are for the most part monosyllabic, and each class of nouns seems to have its special numerative as one bow, *e vare vat*, one deer *e-lang lany*—the *vare* and the *lang* being special numeratives, the one for a class of objects comprising such articles as bows, the other for animals classed with the deer. Both this and the monosyllabic character of the language are strong features in the Chinese language, and would show that the Le language is one of the Chinese family of languages.

* English=Mankind.

In the list that follows I have placed side by side words obtained from the four different tribes of Le that we came across in Hainan. It will be seen that they differ, but only dialectically, and are doubtless merely off-shoots of the same language. The first row was taken down from the mouth of a wild Le at Lingmun (central Hainan), the second from a Seao Le at Yulinkan, the third from a K'lai at Nychow, the fourth from one of the Lao-kwang tribe at Hoitow.

Comparative table of words of four dialects of the language of the Le of Hainan.

Words.	Lakia of Lingmun.	Lai of Yulinkan.	K'lai of Nychow.	Laokwang at Hoitow.
1	E (van)*	Kü (kö)*	C'hih	C'hih (hom)*
2	Tow	Do	Tao	Tao
3	Tsoo	Soo	Foo	Foo
4	Ts'o	Sao	Shao	Sao
5	Pah	Ma	Pa	Pa
6	Tum	Nom	Tum	Tom
7	T'o	Sĭ-too	Tow	T'o
8	Ho	Doo	Gow	Gow
9	Fan	Fow	Fai	Fan
10	La poom	Poo-üt	Foo-üt	Foo-üt
11	La poon ü	La poo ko	Lo foot c'hih	La poo c'hih
17	La poon t'o	La poo too	Lo foot tow	La poo t'o
20	Tow-poom	Do-poot	Tao-foo-üt	Tao-foot
Head	Foo-oo	Dao	Wa-la-koo	Gao
Hand	Tam-o	Zeong	Gee-ng	Jeong
Foot	K'ok	K'ok	K'ook	T'et
Mouth	Pam	Mom	Tsun-pam	Pom
Eye	Oo-cha	Sah	Tsun-shah	Seng shah
Nose	K'at	K'ut	K'at	K'at
Man	Ha-ao	Ao	Wa^nao(chun)†	Ao (chun)†
Father	Bah	P'ah	P'ah	T'ai-ya
Mother	Pee	May	Pai	Pai-ya
Woman	Pai-k'o	P'a-man	P'a-man	Pa-k'ao
Two men	Tow-van ha-ao	Dow-kö ao	Taochunwa^n ao	Tao chun ao
Two muntjac deer	Tow lang lai	Do min lai	Tao lang lawy	Tao lang lawy
Two sambur deer	Tow lang lawy	Do min dawy	Tao lang dooy	Tao lang dawy
Two birds	Tow lang tat	Do long tat	Tao lang tat	Tao lang p'at
One tree	E too ën sai.	Kü ting sai	C'hih tun chai	C'hih poon shai
Fire	Fei	Fei	Fei	Fei
To smoke tobacco	O ja	Loo joo	Low jia	Lao ya
To eat rice	K'an ka	Luk booy	Low t'a-mayak	Lao t'ah
To drink water	O nam	Hao nom	Ong nam	Lao nam
Sun	Ts'a-van	Doo-ong	Tcheo-wan	Sa-van
Grass	Kan	Ng'-ng	Kan	Kan

* Ordinary numerative like "Ko" in Mandarin.

† The numerative applied to men.

This short comparative list shows that the different dialects of the Le vary a good deal, but not so much as some of the dialects of China differ from one another, and not sufficiently to render the one tribe perfectly unintelligible to the other as in Formosa. The four specimens offered were taken from tribes dwelling widely apart from one another, in fact four points could scarcely have been better chosen to ascertain the amount of divergence the language undergoes, and in all probability we would have found the tribes intermediate to any of our two assimilating the peculiarities of each. This goes against the Chinese statement of the *shuh* (or subject) Le being derived from Meao settlers from the continent, unless we believe that the *seng* (or wild) Le were derived in the same way and at no greatly anterior time. Meao settlers do exist in Hainan, but they are recognised as the Meao Le, and as will be seen from the list I now give, of some words gathered from the individual I met in Lingmun compared with words of the same meaning of the Lakia or central Le, the variation between the two indicates cognate languages rather than dialects of the same language.

	Lakia.	*Meao.*
1	E (van)	It (nom)
2	Tow	Ne
3	Ts'oo	Poă
4	Ts'o	Pai
5	Pah	Pah
6	Tum	Koo
7	T'o	Seay
8	Ho	Yet
9	Fan	Dua
10	La poom	Tche-ŭp
11	La poon ü	Tche-ŭp-it
12	La poo chan	Tchap-neai
13	La poo ts'oo	Tchap-fan
20	Tow-poom	Ne-tcheup
100	Lao-van	It pay
1000	Long een	It dew
Head	Foo-oo	Hantĕ bokong
Hand	Fuh-tseang	P'o-ah
Mouth	Pam	Zuy
Eye	Boo-cha	Moey
Foot	K'ok	To-ao
Eat rice	K'an ka	Ne nang
Man	Ha-ao	Mee-ĕn

	Lakia.	*Meao.*
I	Va-o	Vee-ĕn
Woman	P'ai-k'o	Meên-ao
Man's house	Hao-po plungao	Meen ay pao

The numerals one, two, and ten in the Meao sound very Chinese like, but the native gave them with the others as he counted over his fingers; and the word for 100 is positively Chinese.

I sent a copy of my words of the Le language to the Revd. Joseph Edkins at Peking, and he has very kindly favoured me with the following notes:

"The tribes called Laos in our maps are by the Chinese styled Lo. This name is included in the common appellation given to Siam, by the Chinese Siam-lo. The kings of Siam call themselves rulers of the Siamese and Laos as the Birmese Emperors address their proclamations to the Mons and Talaings. The Chinese accordingly style Birmah Mien-tien.

"Among the aborigines of the province of Kweichow there is a tribe called Kolo or Lolo, a name which is probably the same with the title Le or Lakia of the Hainan aborigines, and also with the word Laos in Siam. In the third century of our era a follower of the celebrated Choo Ko-liang is said to have been appointed prince of the Lo-tien (Note.—This is the *tien* of the name Mien-tien, Birmah), and the present Lolo claim to be descended from this ancient tribe. They sit on the ground to eat without mat or tables, and they have deep eyes and long bodies. They are also described as possessing black faces, white teeth, crooked noses, plaited hair, remarkable beards, and a writing like the Mongol.

"In a vocabulary of Meao-tsze words taken by a Chinese from natives of this and other tribes in Kweichow province and published in the *Hing-e-foo-che* I find some resemblances to words in Mr. Swinhoe's lists recently taken by himself from the aborigines in Hainan.

Nos.	*Hainan.*	*Kweichow.*
1	Van	Lan
2	Too	Sung
3	Soo. Foo	Sa. Pan. Pilo
4	Sao	Si. Sang
5	Pah	Ha. Pilo
6	Nom	Junai
7	Sitoo	Sanai. Hi. Holo
8	Ho	Ho
9	Fan	Kulen
10	Lapoon	Silen

Among parts of the body may be noticed.

Words.	*Hainan.*	*Kweichow.*
Head	Walaku. Gau	Lehkau. Luka. Kiao
Ears	Tsunsha	Tsin e
Nose	K'at	Keh
Mouth	Pom	Pan
Foot	K'ok	Kie

Some other similarities also occur.

Words.	*Hainan.*	*Kweichow.*
Eat or smoke	O. Hao. Lao	Hao. Nao-nao. Na-kai
Heaven	Lai-fa	Li-pen. Lun-men. Leh-wai
Sun	Ts'a van	Wan. Mo-c'ha
Moon	Len-nan	Lung lun. T'un. Lun
Stars	Ta plao	Nai-le. Noo. Lao. Le
Father	P'ah. Bah	Pa
Mother	Mee	Mai
Younger brother	Ho-ong	Keu. Ni kai
Elder sister	Ngo	K'ao
Woman	P'ai-ko	Hai-nien
Daughter	Ta-bo p'ai ko	Tai-po. To
I	Ho. Hoon-hau. Va	Nau. Wai. Ku. Kwa
Thou	Mow	Moo
He she	E. Pun	Men
House	Plung-ao	Lan. Leh-keh. Nung-pa

One word common in the Hainan vocabulary is Nam=Water. This is also in extensive use in Siam, as in the name of the large river running by Bangkok the Menam or "great water." This word does not occur in the Kweichow list, indicating that the Le dialect of Hainan occupies a midway position between the aboriginal dialects of Siam and those of the interior of China.

"That at least half the words in the brief Hainan vocabulary now for the first time collected, should be found to resemble words in a Chinese list of aboriginal words taken necessarily in a very imperfect manner, proves sufficiently that the languages are one. At some further time we shall probably find that they are connected by the Meao-tsze dialects of the province of Kwangse."

ARTICLE III.

NARRATIVE OF AN EXPLORING VISIT TO HAINAN.*

By ROBERT SWINHOE, Esq., F.R.G.S., F.Z.S.

H. B. M. Consul at Ningpo.

PART I.

VOYAGE TO HAINAN, NAOCHOW ISLAND, HOIHOW, KIUNGCHOW CITY, ROMAN CATHOLIC MISSION, TRIP TO THE MOUNTAINS, ABORIGINES, TINGGAN CITY.

ON the 29th January I embarked with my native servants on board H. M.'s gun-boat *Algerine*, Lieutenant and commander Domvile. The cruise was not to exceed two and a half months. We left Hongkong on the day of our embarcation, and on the 31st put into Tsapo the harbour of the island called Hailingshan in order to procure a pilot. This island is in the Yangkiang district of the Shaoking prefecture and has been well surveyed. The harbour of Tsapo besides being a fishing station is used as a shelter for junks on the west coast trade. The village is of moderate extent and at a fort near to it is stationed a Sinkwan (or small naval officer) to keep the peace and to collect harbour dues. We visited him and he took us on board of a war junk anchored amongst several merchant junks off the village. This junk was one of a fleet of five under the command of commander Le who was subordinate to the *Chintai*, or Commodore of Shaoking prefecture. The fleet cruised about from Naochow island (south) to Kwangyang (north) for the suppression of piracy. The commander was away at the district city for the new year, but with the help of his secretary, who treated us with the greatest courtesy, we succeeded in getting a pilot to take us as far as Naochow. The guns at the fort were large and looked better than usual, but many of their carriages were old and on one side. The sampans or boats were somewhat egg-shaped and sculled by women, looking much like those of Macao.

* Read before the Society on May 13th, 1872.

There were many fishing junks in the harbour, their sails cut as in the Canton sea-going junks, but they had blunted sterns. Tsapo is a pretty harbour, the hills being covered with grass with occasional occurrence of clumps of trees and brushwood. The rock is granite but abounding in unusually large flakes of mica.

In the evening we were anchored under the island called Ty-chookchow in the Tienpe district. Starting at daylight the next day (1st February) we passed Shuytung. There is a bluff rock below it called Amk'engshan which affords a good landmark. There were many fishing-boats off this place, both large and small; the small kind were like Amoy sampans with single square mat sail, but their sterns were cut off straight and they were rowed with a stern scull. Off Kwanchowshan fishing-boats of another pattern appeared. The hill which affords a beacon to the entrance of this bay is half hidden by a sand hill range in front. We entered the Naochow straits and the pilot put us on a sand bank, which untoward accident was so far fortunate as to give me the whole of the next day (February 2nd) to explore the island.

As you enter the straits Naochow island presents a black and white appearance from the promiscuous mixture of rock and sand, and shows a range of cocoanut trees along a hill at its north-east point. This is the first of the cocoanut that one sees on this coasting route. We wandered over the southern end of the island and saw no cocoanuts, except a solitary tree or two alongside the fort near Naochow town. Along the western coast of the island small rounded boulders of volcanic rock lie scattered about the sand, but further inland similar-sized rocks of a fine bluish-grey granite occur. The soil is reddish-brown clay yielding to sand in many places and becomes very clammy after rain. To prepare this clayey soil for cultivation the natives work in sand. The island consists of low undulating land, a great deal of which is allowed to lie waste. The depressed patches where water is available are converted into rice fields, and we observed the young rice in nurseries ready for planting out. Sugar cane was in full growth, and a tall species of cotton plant four to five feet high with pods bursting and exposing the cotton contained within. Sweet potatoes were the chief cultivation. The houses of the natives were built of fragments of stone with plaster between and were thatched. Little groups of them forming hamlets were ensconced in trees and occurred at long distances apart. Tolerably good cart roads led from one to the other. The carts were small and of rude

structure dragged by an ox on which the driver rode. The "yellow cow" of China was comparatively scarce, its place being taken by a large-humped animal like the Indian zebu. The dogs were like those at Canton, and fowls, ducks, and pigeons were common about the hamlets. The trees that sheltered the villages were banyans, bamboos, tamarinds, pride of India (Melia azedarach), and several handsome species of figs of large and umbrageous growth. In the south-west end of the island buried among trees stands the chief town of Naochow under the control of a Toosze or military captain. He treated us very civilly, and sent off two pilots both provided with certificates from British naval officers and others who had used their services from Naochow to Hoihow and had found the men trustworthy. The natives, both men and women, dress much as the Canton peasantry, They speak a dialect which seems to be a mixture of the Swatow and Canton dialects and differs from that spoken in north Hainan. Naochow town is not large and much scattered; it has a poor market. It is about half a mile inland from the landing beach near the fort which is merely an open strand with no jetties. Naochow and Kwangchowshan are included in the Woochuen district of Kaochow prefecture, and are not as their geographical position would indicate part of the prefecture of Luichow. The civil mandarin stationed in Naochow is a Seunkeen or police magistrate; the military mandarins a Toosze, a Tseentsung, and three Patsung (serjeant). The population of Naochow is stated at 20,000, but I should judge one half of that nearer the mark. A little black sugar is exported and a little of the Luhtow or small green bean. Rice, cotton, and sweet potatoes are grown for home consumption; and for the same purpose fish are caught and salted. The people appear in tolerable condition. No dues are said to be charged for the use of the harbour. Three small pirates visited the anchorage in November of the year preceding that of our visit and under the guns of the fort robbed a junk of $1,000. The natives declared that no mammals of any size are found in their island, and we saw none. Coming within the influence of the north-east monsoon most birds that wind their way down the coast of China extend their journey to Naochow. Among these the common crane was most conspicuous; it ranged also into north Hainan. In the same way on our return we found many of China's summer visitants scattered about the island on their passage back to their breeding quarters.

The following remarks on the passage through the Naochow straits have been kindly afforded me by Lieutenant Domvile: "The Naochow passage is incorrectly laid down in the admiralty chart as there is a bank with only six feet water running off the island itself, as also the bank along the centre. I never examined the passage to the north-west of the bank, but the pilot did not appear to know that there was another channel beside the one we went by, which is much more central than that laid down in the chart with a depth of seven fathoms all the way through, deepening to the fathoms by the fort at the point. The least water was off the north end, but never less than four fathoms. The best anchorage is off the town on the south end of the island, not too close to the fort, as the water is deep. The bar marked on the chart as dry at low water is always dry. The anchorage is only exposed to southerly winds, when vessels might easily anchor in the channel. Wood and water can be obtained here. The fishermen are the best pilots for Naochow; but to take ships forward to Hainan there is a regular staff of pilots, most of them holding good certificates."

Lieutenant Domvile continues, "it would be impossible to give any safe directions for going through the 'Thunder Sands' from Naochow to Hainan as the pilots are continually altering course by the soundings, and there is no land in sight for a great part of the way to obtain bearings by. The pilot we had appeared trustworthy and could give his own directions in English. The distance is about 52 miles, and there are several anchorages (in the open water between reefs where junks put into when the weather threatens and the waves run high). The least water we got inside the sands was two and a half fathoms, which we carried for some time. The coast of Hainan, when you first sight it, is very low and sandy with fishing-villages here and there, and a reef about three miles from the land which you follow for some way keeping it about 800 yards off on your starboard hand. The first prominent object you see is a pagoda hill over Poochin (not marked on the chart) about 450 feet high."

We anchored in the principal port of Hainan in the afternoon of the 3rd February, 1868. It is simply called Hoihow (court dialect Haikow) or sea port, being in fact the outlet to the capital city Kiungchowfoo situate further inland. Lieutenant Domvile remarks that "it is a large straggling bay about three miles deep running very shallow towards its head, and open from north-east to north-west by west. The usual anchorage is off the town

of Hoihow on the east side of the bay in two and a half fathoms. The town is situated at the mouth of a very small river, which is nearly dry at low water. It is three miles from the anchorage and is very difficult to get up to except at high water, as the passage is intricate and very shallow. When the tides are high good sized junks can haul up nearly to the town, but the greater part of them load at the anchorage. The land about Hoihow is low and sandy with a few hillocks in the back ground. The most conspicuous objects seen from the anchorage are a tall pagoda to the right of and just outside Hoihow, the highest peak of the hummocks marked on the chart Marron, and a pyramidal pillar or rock a short distance from the entrance of Jin-me point the west boundary of the bay."

I will here quote what Du Halde (Hist. de la Chine) remarks upon the port: "it is to the north of this island that nearly all the junks from Canton resort. The port is formed by a somewhat broad river, the entrance to which is defended by two small fortresses; vessels otherwise constructed than those of the Chinese would have trouble to enter it; it has only from ten to twelve feet water; commerce attracts thither all the merchants of the island, who have only agents in the other quarters. The capital is about two leagues from this port and is only separated from it by a great plain covered with many fine Chinese sepulchres, among which is seen a cross raised over the tomb of an Italian Jesuit, the first missionary who had entered that island."

Mr. D. B. Robertson, H. M. Consul, and Mr. W. F. Mayers, Vice-consul at Canton had kindly procured for me letters of introduction from the Vice-roy of the two Kwang (the provinces of Kwangtung and Kwangse) to the Taotai, Chintai, and Prefect of Hainan. These we took ashore on the day of our arrival, and handed to the Tsanfoo, or naval commandant of Hoihow for transmission to Kiungchowfoo the chief city of the island, and at the same time requested him to provide us with the means of conveyance for visiting the city next day. Ponies were provided and on the 4th we rode to the city and called upon the three chief functionaries who received us affably. The Chintai (commodore and general) said that he was always pleased to see a gun-boat down as it scared the pirates from the neighbourhood, which he was not able to do himself as he had no means of equipping war-junks. He only possessed one junk, and she was not seaworthy. He told us that only lately three small junks had

been defying them and had beaten off three merchant junks that the commandant at Hoihow had commissioned and sent out against them. He was very anxious that the gun-boat should go out in search for these pirates, which were reported to be not far off, and wished to send the commandant in company in command of three hired junks. Lieutenant Domvile at once agreed on the cruise. The Taotai expressed himself extremely pleased to see us and promised to do all in his power to assist me in my enquiries and researches. He said that he was anxious to see the port open in accordance with the treaty, as the trade of the place was dull and required the foreign element to give it an impetus, especially in the shape of steamers. That we were constantly sending down expeditions of enquiry into the trade of the place, but that as yet nothing had resulted from them. He referred, I presume, to the two expeditions which the foreign customs had sent to Hainan. The Taotai hoped that my investigation would settle the question as to opening the port. He added that he would be happy to provide me with quarters in the city while the gun-boat was away in pursuit of pirates.

On the 6th at 10 A. M. our Cowloon mandarin came off with the Tsanfoo's deputy. The Tsanfoo's junks were lying abreast of us becalmed and the Tsanfoo came on board the gun-boat and took breakfast with us. He was a tall portly individual of gentlemanly manners, and tried to be friendly. Before noon he returned to his flag junk. A light breeze sprang up and the junks were soon in the offing. The gun-boat began to weigh, and I got into a native boat with my Chinese servants and a few traps and made for the shore. There was not much wind and the boat was a long time reaching the town up the small shallow river with an antiquated fort at each side near its entrance. We drew up near the steps of the Kungho hong, the master of which a Cantonese had received instructions from the Taotai to give me accommodation and any assistance I required. These hongs that line the river or more properly creek have all their backs to it, their fronts being on the main street, most of them having private steps to the water, and their names painted conspicuously over their back doors. The master of the Kungho appeared of a sulky nature and did not seem to appreciate the honour of entertaining a British official. He came however and conversed with me for a long time giving me what information I needed and sent those of his partners and assistants that could speak the court dialect to talk with me. But

there was little cordiality between us. Gun-boat officers had visited him on former occasions, and having been recommended by one of these when leaving Hongkong to visit his establishment I had applied to the Taotai to direct the Kungho hong to receive me on my landing. The merchants in Hoihow pretty generally feared to have anything to do with an official personage lest the mandarins might make it a plea for a fine. I had letters of introduction from a British merchant at Hongkong to two Chinese firms in Hoihow, but on sending to present the letters the bearer was told that the head partners of both were away and that no one was left who was worthy to do the proper honours to so distinguished a visitor. My Chinese servants were more fortunate in their friendships. Chinese like the Scotch are clannish, and the Amoy men soon found a hong conducted by their fellow provincials, where they at once met a welcome. The master invited me round and I spent a pleasant evening among them. All spoke the Amoy dialect, with which from long stay in Amoy I was tolerably conversant, and three of the partners could speak mandarin. It was a gala night and lighted paper lamps were hanging in front of each house in the main street through which I passed. The inside of the large temple facing the main landing place on the river was illuminated with glass chandeliers, and was crouded with people, and fireworks were banging and cracking on all sides.

The next morning (27th February) a pony and two chairs were sent and I removed to the city and took up my quarters in an ancestral temple placed at my disposal by the Taotai. The distance from Hoihow to the city of Kiungchowfoo is about 3 miles along a hard and tolerably good road, which runs through gently undulating barren country covered with round grave mounds like those in North-China, which at a distance look like ant-hills. Many of them date from the Ming dynasty, the better class with an erect rectangular slab inscribed with characters on its face, and with small stone censer and vases arranged in line in front varying in number. Some of the oldest Ming graves were of stone shaped like large coffins on legs with the corners of their tops prolonged and recurved. A few low antiquated stone *Pailow* or memorial arches, are seen in different parts of the road, and about halfway an old building is passed under with several of the *Pailow* arranged within. The barren grave-covered tract is composed of a reddish marine deposit scantily covered with grass; but near Hoihow, and extending east and west of it, the ground is depressed

and water being consequently available rice was flourishing; and as you approached the capital plots of land were hedged in and turned into kitchen-gardens in which with the help of night soil the ordinary vegetables of the south of China were being cultivated. The traffic between the city and Hoihow is carried on to some extent by means of coolies with the shoulder bamboo, but the greater part of it is done in wheel barrows pushed by a man behind who supports the weight of the handles by a strap across his shoulders. The wheel of the barrow is forward and caged over, the cage expanding behind and yielding a seat at the insertion of the long handles; below the insertion of each handle is a prop on which the barrow stands when at rest. The burden is placed on the seat in rear of the wheel. Chairs and ponies are used but the barrow recommends itself on account of its cheapness, and the majority of all classes male and female patronise it as a mode of conveyance. They sit facing the wheel and with the back to the driver or propeller, sometimes cross-legged, but often astraddle with a leg on each side, the foot being inserted into a rope stirrup which is suspended by the side of each wheel. Two or three little girls dressed in bright colours might often be seen riding one behind the other, their legs dangling on either side. Ladies sit cross-legged, generally with huge straw hats on, the sides curled down to their ears forming a cylinder through which they can see, but can scarcely be seen. The usual head dress for the ladies is a black napkin covering the head and drawn together behind with the two ends hanging down the back. Their faces are exposed, but they carry palm-leaf fans and when a stranger passes coyishly dip behind them. Some of the fair faces we saw a Chinaman would call pretty, and they were undoubtedly good specimens of the Chinese type of beauty of the "willow pattern," but their charms were disgraced by the fashionable white-powder decoration. I must confess I did not myself appreciate travelling in the barrow. It was too slow, and the seat being so near the ground insufferably hot. Fine large banyan-like fig trees give occasional shade on the road; leafless trees with long seed-pods hanging downwards looked peculiar to our eyes; but notably the strangest sight to a visitor from China was the cocoanut tree which reared its lofty head in every direction. And when the city wall appeared with the cocoanuts towering above it, it was difficult to associate the impression with things Chinese.

A charming city must Kiungchowfoo be to the eyes of native literati; its mandarin residences, its temples and examination halls are all complete and not too much decayed; its wall is in good order; the merchant is not there, and it seems abandoned to official life and sloth. The main streets of the city are tolerably broad and the houses well built but rather low. The wall is about thirty feet high crenellated along the top and about two miles in circumference. The city is truly small, but very compact and well stocked with buildings, though empty spaces and cultivated ground do occur within its walls chiefly at the north-east corner. The wall is strengthened internally by a grassy embankment which gives a good promenade. Outside the remains of a fosse can be traced, but it is not easy to follow out, as it is much cut up and in places converted into vegetable gardens. Near the west gate is the busiest part of the town, and there in the main street live the dealers in carved cocoanut ware, such as teapots, cups, bowls, &c., and in carved scented wood. These toys are usually mounted with spelter, look very tasty, and are much admired and esteemed by the Chinese. They are often seen in the houses of the wealthier natives of the island and find a sale in the Canton market. They constitute the one article for which Kiungchowfoo is celebrated, and efford employment to a large number of hands. Beyond the west gate is a large suburb equal in extent to nearly one half of the city itself. It is enclosed by a low semicircular wall reaching from the south-west corner to the north-west corner of the city wall; the supplemental wall being pierced with three gates. The traffic to Hoihow passes through this suburb, the road leading through the west gate of the city and continuing through the north gate of the suburb wall, or as it is called the small north gate. The chief daily market is held in this suburb outside the city west gate. Inside the east gate a daily market is also held for the accommodation of the people in that part of the town. The north gate exists only in name. It is blocked up and a temple built on the wall above where it once opened. I could not learn when it was closed, but I was told that it was done to keep out the demons who were in the habit of entering the city through that gate in the form of men and purchasing articles with coin which on their departure turned to paper. The gate was blocked up at the clamour of the people, and the demons have not since appeared. Beyond the north wall is the large parade ground, and a group of temples notably the Lung Wang Miao or

"Temple of the Dragon King" built near the sight of a spring whence the best drinking-water is procured. A high and conspicuous pagoda called the Hea Yang T'a or "Summer Sun Pagoda" stands about half a mile from the south-east corner of the city wall, and a lower one called the Shi T'a or "Stone Pagoda" appears about a mile to the west of the south gate. The Saddle Hill or Marron of the chart (Magnan ling) to the north-west of Hoihow (which according to Mr. T. Sampson of Canton who ascended it is an extinct volcano), and stated to be 20 miles from the city, and two or three low hills to the south-west and south-south-west are the only other points in view along the nearly level plain. A river from the Hoihow harbour passes north of the city at a distance of one and a half miles, from which a small stream issues running close by the east gate and yielding water to cultivate the fields in the neighbourhood and consequently off the eastern and southern walls rice again appears in small tracts, and relieves the monotony of the grave-covered barrenness beyond.

Monseigneur Guillemin, French Bishop at Canton, had favoured me with a letter of introduction to a Roman Catholic Missionary in Hainan. The village wherein he resided called Lingshanshe Fooao I found to be ten miles distant from the city. I mentioned my desire to visit him to the Taotai, and the latter at once provided me with a corporal to guide me to the place. The village lay to the south-east of the city on the other side of the river, and consisted of a small group of farms embedded in bamboo. Lingshanshe itself about two miles nearer to the city is a large straggling market-town and contains a fine temple which the Kiungshan Magistrate assured me was six hundred years old. I found the Reverend Michel Chagot in a small one-roomed cottage on the side of a farm. He was preparing a larger room attached to the farm-house for a chapel. He had a few converts gathered round him in the village and was getting together a school of female children. The little orphans that he had collected together read Chinese before me and I heard them reciting responses in the chapel. The Christians were scattered about the country at long distances apart, the Priest told me, and were now much diminished in numbers. His district was the western half of the north of the island, while the eastern half was under the control of a second French missionary. The two met only once every three months. The Roman Catholic Mission to Hainan dates so far back as A.D. 1630, when a Portuguese Jesuit of the name

Benoit de Mathos established a church in Kiungchow city, where he died in 1651, and was buried in a piece of ground about two miles from the city which he had obtained for a Christian cemetery. He was succeeded by other Jesuits, Portuguese, French, Italian, and German. The tomb of the only German is of the latest date 1686. M. Chagot is positive that the Jesuit Missionaries resided and had a church inside the capital, and declares that during the persecution this church was converted into a temple of longevity which still stands, and in which the authorities assemble to make obeisance on the birth days of the imperial family. There was in the city another place of worship known by the name of the Temple of the Cross, but this had also been devoted to heathen purposes. In the old cemetery one hundred and thirteen graves bear the mark of Christian tombs, but the ground has been neglected, many of the tombstones removed and broken, and two of the four boundary stones carried away. After the suppression of the Jesuits the Christians were for a long time deprived of missionaries. Towards the end of the eighteenth century the Bishop of Macao sent some Chinese priests. In 1849 these priests were replaced by French missionaries, the first of whom was so badly beaten by the people that he died of his wounds. M. Chagot had been trying in vain to procure from the Taotai permission to wall in and keep in order the cemetery. He longed to have the port opened to foreign commerce in the hope that it would lead to his establishing in the city. I stayed the night with the worthy priest, and partook of his humble fare. Humble it was indeed, and great must be the faith that impels a man to desert the comforts of civilised life for such a state of wretchedness!

My time was spent in the city in paying and receiving official visits, and in rambling about within its walls and its environs until the 14th of February when the gun-boat not having returned from her cruise after pirates I thought it well to make the best of my time and penetrate into the country. The Taotai very kindly detailed a junior military officer to accompany me, and at noon we started for Shuy-wei-sze said to be the great place of barter between the independent Le mountaineers and the dealers in connection with Hoihow. The Taotai desired to pay the expenses of the journey, but this of course I did not allow. Chairs and coolies had to be engaged for the whole time and taken with us, though some part of the journey was to be made in boats. From the south gate and eastwards in half an hour we reached the

embarking-place on the river, and packed into a long and broad flat-bottomed boat covered with semicircular moveable mats, and propelled by means of sails and poles. The river which debouches into the harbour was at this dry season of no great breadth, though judging from the expanse of sand on either side in many of its reaches it must swell during the midsummer rains to quite a broad stream. No boats come up it from the harbour, and I was told that such was impracticable. It is only used for communication with the interior by means of these flat-bottomed boats that can drag over the rapids, one of which is encountered immediately on leaving the city landing-place. The country through which the river flows as far as the district city of Tinggan is of little interest. The reddish gravelly earth scantily covered with grass and sprinkled with tomb-mounds is the prevailing feature; small villages shaded with bamboos, banyans, and cocoanuts, appear at long distances apart, with more or less cultivation of dry rice and vegetables around them. Wet rice fields are not so abundant as the neighbourhood of a river would ensure at Canton, but the land in many places is much higher than the water level, and it would require many water-wheels and aqueducts to convey the water for irrigation. The mandarins complained of the indolence and constitutional weakness of the people, and these might account for the poor display of agriculture. In some places however we came across weirs which forced the water under the play of wind-moved water-wheels, and the cultivation, though twenty to thirty feet above the level of the river, looked fresh and promising and the rice was several inches high. The land traversed consisted of a coarse gravel of marine deposit (a block of coral occurs on the bank of this river some 12 miles from its mouth) and is no doubt very sterile; no rain had fallen they told me, since October; and the face of the country looked burnt up. But when Amoy men can make the granite detritus, which constitutes their soil, smile like a garden, we must believe that it is not the poorness of land but the want of energy that impedes cultivation in Hainan. About ten miles up the river the banks get hilly and more trees appear, with a few small villages engaged in the manufacture of earthen jars. After much meandering in a southerly direction the river brings us to a pretty tree-shadowed landing-place, where we disembark and after a quarter of an hour's chair-travel find ourselves in Kewchow seventeen miles from Kiungchow city. This fair-sized market town is the halting

place of the dealers from the bartering stations of the interior, and we passed between it and the landing-place many buffalo-drawn carts laden with rice, cotton, deerhorns, and skins and hides of different animals. Large quantities of earthen jars were piled in the yards of the town. Leaving Kewchow we kept to the westward of south along a large waste grassy plain undulating gently, and patched with groups of grave mounds. We passed to the left of a large pagoda called Pang Kao T'a, and after a journey of three miles put up in the evening of the 15th at a small halt-place called Pangkaowan in the Tinggan district. We had up to this been travelling in the Kiungshan district, the chief city of which is Kiungchowfoo or the capital of Hainan. We started early (February 16th) southwards passing to the right of the solitary round-backed hill about eight hundred feet high which is visible from the walls of Kiungchow city. The hill from our present view appeared conical. It is called by the natives Langhuyt' sooy. In the afternoon we halted at Lung-fa-he, a large market-town seven miles southward of Pangkaowan. We continued along a poor country, sandy, gravelly, slightly undulatory and little cultivated. The hills began to peer in the distance. Some of the houses in the hamlets had blocks of slate in their walls. A curious botanical phenomenon here came under observation, a group of pine trees was standing beside a clump of cocoanuts! A strange zoological phenomenon was also noted, a pair of magpies had built their nest in a cocoanut tree! At 3.14 P.M. we crossed the river which here runs north and south, our course being to westward of south, and at 4.35 we entered a valley between the outermost hills, or spurs running westwards from the mountains, and soon reached the halting-place of Potsai, where we stopped for the night. These resting-places, or Tang, occur on the main road about every five miles; one soldier is stationed at each, instead of five the proper guard. I crossed some farms to the range of hills opposite, and climbed to the top about 200 feet. The country we had traversed had sunk in level, and then gradually risen. The conical hill was not visible, and there were no other recognisable landmarks. Our valley seemed to extend to the southward a long way, opening out as it went along. Mountains appeared in the distance, and the country began to get interesting. In Potsai there were only a few houses, so we passed a quiet night. We started (February 17th) at 7 A.M. for Shuyweisze distant eleven miles in a westerly direction. The valley rapidly rising

was grassy patched with scrub and with but little cultivation. A few acres on the hill were burnt clear and planted with tobacco. At 20 to 11 A.M. the hills closed in, our course being westward over them. At ¼ to 12 we descended to a valley partly under wet rice. At 2.20 P.M. we passed over a grassy hill with black boulders of granite peeping through its surface. The villages here abound with woods of lofty trees chiefly of the Fig group and Liquidambar formosana, Hance. At ¼ to 3 we arrived at the mandarin station of Shuyweisze, locally called Tunchang. The Taotai had forwarded word that I was to be expected, and I was consequently received with a salute and every other courtesy, and conducted to the chief temple which stands outside the town, where I was at once visited by the military and civil authorities, presented with provisions, and provided with lodging. The civil mandarin at Tunchang is a Seunkeen or Police Magistrate, the present incumbent being a native of Tchenanfoo in Shantung province near Tientsin, and not speaking a word of the local dialect found the place very dull, having only his secretary and the Tsungyay (the military authority) to converse with. The Seunkeens hold their appointments for three years; the Tsungyays are changed every year. Poleao a place some miles further within the mountains is the proper bartering station bordering the Le territory, but it was found so malarious and unhealthy that in the reign of Keenlung the mandarins were allowed to move out and fix their offices in this healthier position. In Tunchang a market is held every other day, but the Le do not come to it. Its well-wooded neighbourhood affords excellent opportunity for studying the natural history of the country without the obstruction of jungle and inexcessible hills. The people have much of the Le blood in their veins, are small and ugly, with cramped faces, heads flat behind abounding in bumps, and broad nostrils; and their women are no beauties. Shuyweisze is in the Kiungshan district, and as the mandarins there did not encourage my travelling into the mountains to make the acquaintance of the Le, I determined to proceed further south to T'aipingsze in the Tinggan district, where the Seunkeen, whom I had met at Kiungchowfoo, promised me greater facilities. I accordingly started at 10 A.M. on the 19th February and crossed the river winding westwardly, which here forms the boundary between the two districts of Kiungshan and Tinggan. We passed coolies carrying out rattans and manis skins. Rice cultivation was more extended,

the rice being a small red kind yielding two crops a year. At our second resting-place the small river-stream appeared again winding a little west of south-west, our course being a little east of south. At 1.30 P.M. the fine large trees about and between villages formed quite a forest. At 2 P.M. reached Nanleu the mandarin station of T'aipingsze seven miles only from Tunchang. It was market day, and the long street, that I was carried down to the temple prepared for me at its further end, was thronged with people. I was saluted as before and received with all politeness by the Seunkeen and the Tsungyay. This Seunkeen was full of information and very communicative, but I was warned not to believe implicitly all he said. As in Shuyweisze so here the mandarins were at first compelled to reside at the bartering town well within the hills, but were allowed to withdraw on account of the changk'e or malaria of the mountains, which is so injurious to Chinese life in Hainan. The original Taipingsze was at Lingmun, it was then moved out to Fungmoo and finally to Nanleu; the first still continued to be the bartering station, and no Le found their way to the two latter. The forests were more extensive at Nanleu than at Tunchang and the opportunities of studying the natural productions of the country much greater. The Tsungyay was very attentive, pursuing me in my excursions with tea and refreshments, and I endeavoured to make the best of the occasion.

At 11.20 A.M. on the 21st February we started for Lingmun travelling a little south of south-west and reached Fungmoo a market town five miles distant, consisting of a long street of shops selling medicines, toilet nicknacks, paper, prepared food, fuel and rice. The tea drunk here was infused from fried barley. At 10 to 2 P.M. we continued, our course being more southerly, and in an hour we reached the resting-place Pihtowteen where we halted ten minutes before commencing to ascend a mountain range cleared of jungle but patched here and there with scrub and clumps of trees. It was hard work for the chair-bearers and porters. The path led pretty steeply over the west corner of the barrier chain to the height of about 800 feet, and then down into a large partly cultivated amphitheatre among the mountains, in which the bartering town of Lingmun (gate of the mountains) was situated. The chain we crossed closed the large broad gradually rising valley in which we had been travelling since entering the hills. The town of Lingmun consists of one wide street about 150 yards

long with low-roofed shops on either side, and broad covered stalls for three quarters of its length towards its further end, where a fine temple closes the street and divides its termination into two small exits with barred gates one either side; at the end we entered there is also a gate. From the middle of the main street on the left side another street with shops runs at right angles; this ends also in a gate with bars. To the grand temple they carried me through the crowd assembled in the market. The Tsungyay from Nanleu, who has also the control of Fungmoo and this place, was here to receive me. It was market day and there were many Le in the place; the soldiers to my surprise dragged in three of these and soon after a Meao-tsze for my inspection. The Le were greatly alarmed and begged us to spare their lives. The Meao, who was dressed as a Chinaman and might very well have passed for one, was bolder. All the Le had the hair of the head drawn up and twisted into a knot on the crown tied round with white tape at its base. The straggling hairs at the back of the head were caught and twisted into a small round knot behind. Over this coiffure they wound a turban cloth. One was dressed in Chinese clothes, the other two had Chinese jackets with the front and hind aprons peculiar to their costume. Two of them were flat featured and rather fair, one having the eyes slightly oblique; the third was bronze in complexion and had a prominent nose. Their cheek-bones were not peculiarly high, and I have seen among the Chinese faces very like theirs. They wore a frightened uneasy look, and wanted to kowtow saying that they had come to market to buy and sell and were good men. One sat down in the mandarin's seat and when reproved replied in broken Chinese that he was a coarse man and did not know what was right. After taking down a few words of their dialect and of that of the Meao we dismissed them all with a present of cash.

The hills about Lingmun are clothed with little else than grass and difficult to get on owing to the deep ditches at their feet which the colonists employ for cultivation. The woods are all removed for fear of giving shelter to the hostile Le, but the ranges on the south of the amphitheatre show bushes and the mountains beyond arecovered with timber and fine vegetation. My desire of course was to visit a Le chief, but to do this required too much time, and it could not be done without an interpreter. The mandarins declined to accompany me, as since the troubles at Nychow some six months ago they were greatly afraid of the Le; and they put the

people against assisting me. I had therefore to content myself with spending a day at a village of a Le family who had submitted to the Chinese authority. We ascended the hills in the east corner and followed a path winding somewhat to the southward. I conjectured the range about 1,200 feet above the valley. From this height we got a fine view of the high peaks further south. The lofty mountain range seemed to run north and south, the highest peak I should say not exceeding 7,000 feet. It showed no snow. To the west the range is lower and more broken. Two high peaks were conspicuous, the northern and southern; the one bearing N. 82° W., the other S. 4° 30′ W. Lingmun is in a raised plain undulating and surrounded by hills. To the north-west and south-west only small hills occur, the plain gradually rolling up into hills. In the distance to the south-west no high mountains are visible, and there seem no natural obstacles to having a road in that direction across the island. The Chinese as long ago as the Sung dynasty looked upon the cutting of a cross-road through Hainan as the easiest way to subjugate the natives and they deputed for this purpose a man well acquainted with the Le, but he lost his life at their hands in the attempt. The hills we traversed were very lovely, green checquered by lines of trees crossing one another like a park at home in a hilly county. The path ran up hill and down dale till rising into the bosom of a hill we found the Le village with its cultivation around. The women were planting out young rice in some small wet fields, and had on the small *sarang* or Malay petticoat, but before they presented themselves they donned the Chinese nether garment. The men were shaved and dressed like north China labourers. They were all very dirty and seemed very poor.

The best shops at Lingmun were the stationers, druggists and tobacconists. Iron and copper-smiths drove a good trade in making knives and domestic implements, earrings and other ornaments for the Le. Agents for Hoihow exporters of Le produce had also their residences there. They collect what the Le bring out in driblets for sale and barter, and when sufficient is got together to make a parcel they forward the same to Hoihow. With the Le merchants, for the Le appear to have superior men who come out well dressed like Chinese country-gentlemen, they keep accounts, and settle by payment in kind or cash as required. To the poorer Le they pay cash at once, and these expend it at the central stalls on the Chinese goods, which on every market day are laid out

temptingly before them, such as salt, iron-pans, crockery, domestic utensils of different kinds, hatchets and knives, blue and white cotton-cloth, combs, buttons, earrings, hair ornaments, &c. The sale of gunpowder and firearms is naturally forbidden, but arrow and spear-heads they are allowed to purchase for the chase. The Chinese procure from them young horns and sinews of the three species of deer found on the island (Cervus eldi, C. hippelaphus, and C. vaginalis); skins of two of the species (that of the spotted deer—C. eldi—being thin and worthless), hides of buffaloes and cattle, skins of the scaly anteater (manis) for the sake of the scales, skins of several small animals; rattans, timber, fire-wood, and betelnut. The Le grow dry rice for their own use, as also tobacco. The cultivation of tobacco that we saw on our road up, the mandarin assured me, was only this year's first attempt on the part of the Chinese in that neighbourhood. The hides are taken to Hoihow where in the southern suburb of the town the hair is planed off and they are dressed for export. Some of the leather, chiefly that from buffalo hides, is manufactured into very tolerable boxes, which are exported to various parts of the coast. The Le also collect and bring out a coarse kind of tea called *Teen-cha* (celestial tea) which is retailed at about two shillings a pound. It looks like the dried leaves of a wild camellia, and has an unpleasant earthy taste when infused. They bring out also the bones of the animals they slaughter to sell as manure. Chinese often escape justice by fleeing to the mountains and getting themselves adopted into Le families.

The Meao-tsze or Meao-le are descendants of some aborigines of Kwangse province, who some centuries ago crossed over to this island. They inhabit in some numbers the lower hills of these parts, are shaved and wear the queue in submission to the Chinese. They talk among themselves their native language, but in the market an indifferent Chinese. They are successful farmers growing the best white rice, and pasturing large herds of cattle. Some of the mandarins insisted that they were simply Chinese settlers from Kwangse, but their language betrays them, and they are not backward to confess their origin.

The Le pay no taxes, and their trade seems not to be taxed. Those however that live in the hills under the wings of the Chinese pay like the Chinese squatters a farthing a year on every areca palm. This tax is a light substitute for the ground rent levied on the plains and in the villages.

It was hard to wrest ourself away from a place so full of interest, but I had to bear in mind that the gun-boat would be waiting for me at Hoihow and her commander anxious to fulfil the voyage within the limited two and a half months. Accordingly at noon on the 24th February we left Lingmun, and steered as direct as the road would permit for the district city of Tinggan. We reached Nanleu at 5.30 P.M. and spent the night there. On the road thither we had passed coolies bringing out loads of ducks' eggs preserved in red clay considered a great delicacy by the Chinese, also packages of the large spathes of the areca palm used for packing sugar, &c. At Nanleu white or albino buffaloes with pink eyes are particularly common. Brindled cattle were often seen in the large herds that many of the farms possessed; the cattle are small and apparently a cross between the little yellow cow of South-China and the zebu or humped breed of India. Cattle sold in the market for slaughter pay a tax of nine pence a head; buffaloes are not taxed. The civil mandarin receives the taxes at Nanleu; the military at Fungmoo and Lingmun. Chinese laws forbid the killing of cattle; the squeeze is a douceur for allowing the infraction of the laws. The flesh of the slaughtered is sold in the market, and as an animal is rarely killed until worthless for agricultural purposes, the beef of the country is not of the best kind. The want of rain is much felt, rice was at a shilling a pound, more than double its usual price, and under instructions from the Taotai the mandarins were supplicating for rain from the 2nd to the 7th of the moon, and the slaughter of all flesh was for that time prohibited. Since October scarce any rain had fallen. Market is held at Lingmun, Fungmoo, and Nanleu on the same alternate days. The people in the country are poor, but seem pretty comfortable. They have no large landed proprietors or capitalists as in Formosa. The mandarin assured me that a man possessing from five to eight hundred pounds was in his village considered a wealthy man.

We left Nanleu on the 27th February at 12.45 P.M. and travelling northwards reached Tunchang by sundown. I put up in a house in the town in preference to the temple and was begged by the mandarin (Seunkeen) to delay my departure until I could fix the *Fungshuy* of a residence he was about to rent for his yamun. The former yamun or office was blown down in a typhoon twenty years ago and still lay in ruins, the mandarins having since had to reside in private houses. The *Fungshuy* or "wind and water" of a site implies a healthy position with a good prospect, protected

by certain charms such as particular trees, quaintly shaped rocks and so forth against the evil influence of demons. Chinese geomancers provided with a compass work out with great parade the "fungshuy" of a place, and the poor Seunkeen having spied out my travelling compass insisted that I was an adept at geomancy, and emplored me to help him out of his difficulties.

We left at 8.30 A.M. and proceeding northwards passed after an hour's travel the market town of Shanfoo. Coolies were met carrying out deer's sinews and waterproof coats made of the small leaves of the caryota palm. Little cakes of black sugar were selling at the scantily-provided refreshment-stalls at less than a farthing a piece, sugar-cane at the tenth of a farthing per stick of one and a half foot length, and a cup of water with a few salt-soaked small wild berries of a species of *Muya (anglo-sinice, Arbutus)* for the fifth of a farthing. Next to tea there are few things so refreshing to a heated traveller as sweetened water with a slight mixture of acid, and the jaded coolies know how to appreciate it. But the great refreshment of the road, the cool jelly strained under water from the seeds of the ogio fig, which yields such a treat to the wayfarer in Formosa, was unknown in Hainan. These however are mere snacks on the road taken at the short halts, followed by a few whiffs of tobacco. At the long halts the coolies fill themselves with rice washed down with barley tea, and most of them before resuming their toil take a few draughts of comfort from the opium pipe. At a push they walk and carry well, but they have neither the strength nor the endurance of the coolies at Canton, who are I think without exception the best porters in China.

We continued a little eastward of north and at 3.25 reached the town of Sinhing. This is a moderately sized market town in the Kiungshan district and reckoned about eight miles from Tunchang. At 7 A.M. on the 29th February we left Sinhing for Tinggan city distant nine miles. From fine clear sunny weather with a thermometer ranging between 70° and 80° we suddenly dropped into a damp drizzling atmosphere the thermometer falling to 62°. At 9 A.M. the last of the hills were passed. It was blowing a northeaster and the wind was so cold that the coolies did their utmost to push along, while I lay damp and chilled in my chair. The country-people were about in their waterproof coats, some sitting on buffaloes with the waterproof expanded to shelter both man and beast; buffaloes by themselves were also passed covered with waterproof. We made only one short halt in the plain, then

hurrying northwards arrived at the city of Tinggan at 2 P.M., proceeding along the sandy shore of the river and entering from the river bank by the west gate. I was carried direct to the Hien magistrate's residence, and invited in. The Hien, a native of Hoonan province, whom I had met before at the capital, was very kind, insisted on seeing me in his reception hall wet and dirty as I was, and provided me with a room adjoining that of his secretary. In the evening he came to the secretary's room with other mandarins and guests, and the company enjoyed themselves in smoking opium, chatting, and drawing on fans.

The next morning opened with the same style of disagreeable weather. I took a stroll with the secretary and some others on the city wall and about the town. The wall is about twenty feet high and much dilapidated. The gates are small with low arches, and there is plenty of empty space within the walls. A market is held in the centre of the town every other day. The city has four gates and the wall is said to be 6,000 paces in circumference. The Confucian temple is the finest building but it is old and wants repair, as do all their public buildings. The Tsungyay, the chief military authority in the place lived in a private house. The secretary said with a smile that the city was simply a fair-sized village with a wall round it; and except for some of the temples and public buildings it might easily be taken for such. The mandarin seemed on very friendly terms with his employés. He said he regretted that he could not ask me to dine with him, but while the supplication for rain lasted the yamên was supposed to be on vegetable diet. He procured a boat for me, made it comfortable with boards and matting inside, and insisted on paying my passage to the capital. I protested against it in vain; the reply was that the boatmen had already received their fare. The boat dropped down to the front of the north gate, as our course was northwards. The river winds past the north and west gates, and must reach the walls of the city when full from floods. The north gate is very low and dark below, the road under its archways inclining downwards towards the river. The Tsungyay of Taipingsze had escorted me to Tinggan and insisted upon continuing with me to the capital, of course for selfish reasons. He wanted me to speak a good word for him to the Chintai at Kiungchow. He was the brother of a well-to-do shop-keeper in the city, who had purchased him his year of office for the sum of £60. He wanted continuance in it for another year, and sought to be raised from the ninth to the

sixth rank. Before leaving Hainan I did bring him to the notice of the chief authorities, and they promised to give him some return for his great attention to me.

The rain poured without mercy, so drawing to the mat-covers of the boat we saw little more of the country until we moored next day at 11.30 A.M. at the city landing-place, whence I reached my quarters soon after noon.

END OF PART I.

PART II.

CIRCUMNAVIGATE HAINAN, POOCHIN HARBOUR, CHINLAN RIVER, LINGSHUY, YULINKAN BAY, NYCHOW CITY, PAKLAI, HOITOW, HEONGPOO, HAOSUY, HUNGPAI.

THE gun-boat had been back some days, and was at anchor in Hoihow harbour. Her cruise had been unsuccessful, and since her return the weather had been very wet and squally, while we were having it so fine among the hills. During my absence the Urhfoo or Subprefect of Pihsha (locally Backsha) in the Luichow prefecture had been to pay his respects to the Taotai, and had been quartered in the front rooms of the temple allotted to me. Lieutenant Domvile, Capt. Holroyd and I again visited the three chief authorities, and the Taotai invited us to a luncheon at which the Chintai and Prefect were also present; the most relishable article at the feast was hot milk seasoned with almonds. The Tsanfoo or Captain of Hoihow commissioned a junior naval officer to proceed with us on our cruise round the island, and having engaged the services of a good pilot we were ready for sea on the 4th March. Before embarking a few complimentary presents passed between myself and the authorities.

We left Hoihow harbour at 5.15 P.M., and anchored outside the bar of the Poochin river at 8.30 the same evening. On the navigation from Hoihow to Poochin I quote from Lieut. Domvile: "proceeding along the coast from Hoihow to the eastward after passing the village of Packsha (the eastern boundary of Hoihow bay) the land forms a large and deep bay with the mouth of a shallow river at the head nearly lost in the sands. The pagoda at Poochin is in sight from a short distance outside Hoihow. The land does not run due east as the chart shows, but bends slightly to the southward; the ship's course after clearing Hoihow being E. S. E. for ten miles and afterwards E. $\frac{1}{2}$ S. The distance from Hoihow to Poochin is shorter than given on the chart, being from the anchorage at Hoihow between 20 and 21 miles by the ship's run. The soundings deepen towards the north-east of Hoihow

harbour, the lead giving 5 and 6 fathoms and occasionally 7 fathoms when abreast of Packsha and about half a mile off shore. Then for about half the distance to Poochin the depth is very regular at 5 and 6 fathoms. As Poochin is approached, they lessen to 4½ and 4 fathoms, the latter being the depth at the anchorage. Numerous fishing-stakes are set up on the sands along the coast, which necessitate a careful lookout and quick steering to avoid. Off the mouth of the river it runs very shallow in places and the lead must be carefully watched. From the anchorage Poochin point bore N.E., the left entrance to the river S.E. about 1½ miles. The appearance of the entrance is a well defined gap cut out of the low land gradually increasing in height towards Poochin point. The pagoda is on the highest point just inside the land about 450 feet high. We only remained at Poochin 13 hours so had not time to sound the bar thoroughly, but in the cutter and gig we took two lines of soundings, and the least water obtained was five feet at about half ebb. The pilot informed us that the ship could cross it at certain tides, and said that the deepest water was over towards the north bank; inside there is a capital anchorage in 3 or 4 fathoms." Poochin is in the Wênchang district and about twenty miles by land from the capital. The town is situated on the north bank of the river near its mouth, and is simply a large fishing village. A Police Magistrate or Seunkeen and a Sinkwan (naval officer) have the control of it. Its small harbour is resorted to by trading junks in place of the exposed anchorage at Hoihow during the dangerous typhoon weather in summer. The fishing junks of the place, as of several of the neighbouring ports, pursue the large whale of the China seas (Balænoptera Swinhoii, J. E. Gray) when it visits their waters in the early spring. Its flesh is eaten, its fat is boiled into oil, and its bones used for manure.

At 1 P.M. (April 5th) we weighed and leaving Poochin "kept in two or three fathoms about 1½ miles off the land round Ingpow when the soundings quickly deepened to 7 fathoms. There are several reefs of rocks close to the point, the most dangerous of which are above the water about three cables from shore in a line with Poochin pagoda E.S.E. We steered N.E. by E. which took us to Hainan Head distant about 3 miles, keeping about 1½ miles from the land. Hainan Head or Capsinmoon is a sandy point about 200 feet high with a reef of rocks running N.E. for 1½ miles, nearly the whole of which are from two to four feet above water. The pilot passed close to, leaving them on our right hand, and the

'chowchow' was tremendous. It would be very unsafe for any vessel that does not answer her helm quickly to attempt the passage. From the anxiety displayed by the pilot to keep close to the rocks I conclude that this must be a small channel between the land and the sand-banks to the northward. What they call Mucklantow is the highest land above the point, sloping down to Capsinmoon. Before rounding we had 9 to 10 fathoms, close to the rocks 5 fathoms, and afterwards 7 to 8 fathoms about two miles from the end. The two islands marked Fankyen on the chart are not in existence, and the Taya islands must be much further to the east than laid down on the chart as they were not to be seen from our mast-head. The coast is a series of white sand-hills, and Poochin pagoda is plainly to be seen over them. Outside a long reef extends about 7 miles off the land for 20 miles in a southerly direction. There is a village called Sachow about 9 miles from Hainan Head with a little cultivation about it. The land from Hainan Head runs S.E. 16 miles ending in a point with a double hill called Moofo, which at first we mistook for Toncon, there being no mountain on this point marked on the chart. It was difficult to estimate the height, as we anchored late and weighed very early, but it must be from 800 to 1000 feet high. Between Hainan Head and Moofo there are several patches of sand-banks from half a mile to a mile off shore, and off Moofo it runs very shallow to two miles off. We anchored in $3\frac{1}{2}$ fathoms with hard sand bottom."

Leaving Moofo at daylight on March 6th "we steered a little to the eastward to get an offing, and then altering course under direction of the pilot we averaged S.S.E. until abreast of Toncon distant 20 miles at 11 A.M. Toncon is a small range of hills the highest of which was clouded over in passing. The point is very bluff and there is deep water close to. There is a shelter to be found in the N.E. monsoon under the bluff. From Toncon to Chinlan the course is S.W. $\frac{1}{2}$ W. eleven miles. The appearance of the river from the sea is quite tropical, a low sandy beach with forests of cocoanuts extending almost to the water's edge, and a bar breaking across. In making the entrance the pilot stood in, but on shoaling the soundings the course was altered so frequently it gave no opportunity for noting any good course for going in. He appeared however to keep about 400 yards from the south reef and the least water was $2\frac{1}{4}$ fathoms. On closing we passed close to the point of the north bank, and after the first bend kept a

midchannel course, the soundings deepening to 5 fathoms inside." On our way down we saw some large whales.

The Chinlan river, also in the Wênchang district, affords "one of the most beautiful and safe harbours on the coast for vessels that are able to cross the bar. The anchorage is about a mile and a half from the entrance. The weather was so bad that we could not sound the bar." The district city of Wênchang hien stands on the north bank of the main branch of the river ten miles from the anchorage, but we were not able to visit it on account of the continuance of rain, and because the *hien* or magistrate of the district was busy with military examinations.

This city is said to be sixty miles distant from Hoihow *viâ* Tinggan city and the Kiungchow river; and by a branch of the Chinlan river the Poochin river can be approached to within seven miles. The abundant forests of cocoanuts with intervening mangrove salt swamps reminded me forcibly of the vicinities of Galle and Colombo in Ceylon, and indeed the cocoanut is the chief wealth of this district. In no other part of the island was it seen in such abundance, and this is curious when we consider that this district is in the north-east corner of the island and exposed to the full force of the winter monsoon. There were in harbour a good many small junks both trading and fishing; also one or two large junks from Macao that had brought rice, and were shipping pigs. The chief articles exported are cocoanut fibre and bark, and shoes and soles of same, China grass and grass-cloth. The fishing-junks are small and flat-sided with square sterns, are painted black, and have no eyes on the sides of their stems as most Chinese junks have. They are engaged sometimes in whale-catching, and are to be met with on all parts of the Hainan coast as carrying coasters. "The Tinggan district has no sea, and the Wênchang district has no Le" says a native verse which was quoted to me by the Taotai of Hainan, meaning of course that Tinggan hien was an inland district not bordering the sea, and that Wênchang hien not extending to the mountains did not possess any of the wild tribes. "The natives of Wênchang are all Chinese," he added, "and are largely given to emigration to Cochin-China and the Straits, where they find labour for some years, and then return home with their savings." I had before noticed at Singapore that many of the servants employed by Europeans there were Hainan men. Some that served in the chief hotel of the place spoke very tolerable English, and showed a good deal of intelligence. The emigrants

go abroad in junk loads every winter monsoon from the Chinlan river, and others return in the same manner by the summer monsoon. During the latter season the pirates accumulate and watch for the return junks. Few but the prosperous return, so that if the pirate is successful in his capture he is sure to make a good prize. The pirates thus grow rich and bold, and when the season slackens in Hainan they often venture up to the neighbourhood of Hongkong and even dare to attack foreign ships. To check these "monsters of the deep" our naval authorities at Hongkong frequently send gun-boats to scour the west coast, and this, as I have stated before, was a part of the mission of the *Algerine*. The Sinkwan, or naval officer, of the port of Chinlan called on us on our arrival, and made himself useful in supplying the wants of the ship.

April the 8th dawned with a fair wind which we could not afford to lose, so we weighed at 8 A.M. My head Chinese servant, a native of Anhwuy province, did not come off and we had to leave him behind. He was a great opium smoker and that morning appears to have indulged to excess under the hope that on account of the inclemency of the weather we would not leave so soon. He could easily walk across the island to the capital where he had friends, and whither he knew we would again go, so as his services were not much needed and as a punishment to him we left him behind and steamed away. "The character of the coast remains much the same for the first ten miles, but after that the vegetation becomes less and the land hilly with very high ranges in the back ground. There are several anchorages on the coast, generally protected from the north and east, but exposed to the south-east. At Kechih about 32 miles from Chinlan there is a pagoda which makes a good land-mark coming down the coast. The course averages about S.S.W. keeping about 4 miles from the land, with no soundings at ten fathoms. About 40 miles from Chinlan there is a small river leading to the city of Wanchow the capital of the Wan district, with two remarkable rocks at the entrance, but there is not sufficient water on the bar and the anchorage is unsafe. We stopped off Tyfar island intending to anchor for the night, but the water was so deep and there was so little shelter that we proceeded to Tychow.

"Tychow has the appearance of two islands connected by a low sandy beach, the southeast extremity bearing the highest hill about 500 feet." It is covered with coarse grass on its exposed parts,

with patches of brushwood in its ravines, and with blocks of blackened granite peering here and there. This and Tyfar together with the small islands round to the southward of Hainan are said to yield birds' nests of a very superior quality, surpassing all others in flavour, but scarce. The Chinese Gazetteer of the Kiungshan district (Hainan) declares that they are built by a species of "swallow" the size of a dove! We looked out in vain for this species of swift. The nests are collected in the autumn when the birds have deserted them. The pilot said that it was necessary to dive to get into many of the caves which the birds enter from small holes above. "The anchorage is off the west side of the sandy beach which joins the two parts of the island. We anchored in $8\frac{1}{4}$ fathoms about one mile from it, the water gradually shoaling towards it."

Below Tychow island the character of the mainland changes to a series of high ranges of mountains covered with vegetation. In passing inside of Nankin island (9th March) we sighted a suspicious looking junk close in shore, which as we advanced made for a small lagoon about a mile east of Nankin island, into which she was helped over the rocky bar by the surf. Her crew discharged two big guns and tumbled them overboard, and themselves made for the shore, where they could be seen squatting behind rocks watching proceedings. The Cowloon Commissioner and the Deputy for Hoihow were united as to the junk being a pirate, so the gun-boat anchored and after firing a few shots at her sent some men and set her on fire. The boats were nearly swamped in crossing the bar. When they were recalled numbers of fishing boats appeared from various parts of the long beach and swarmed to the pillage of the junk, but she had no cargo and the fire had not left much of her spars or rigging worth saving. These fishermen were a barbarous looking lot, many of them perfectly naked. Their boats were constructed very like the Japanese boats at Nagasaki. The land to the south of us was steep and mountainous covered with wood, and on the north ran the low sandy spit whence the fishermen appeared. On leaving this anchorage we steered to Tienfung rock passing between it and the mainland. The whole of this part of the coast from the French survey seems correctly laid down in the chart. There is a lagoon called Howtowwan about 5 miles W.S.W. of Saddle island, but it being too shallow we proceeded on to the anchorage off Lingshuy bar. While off Lingshuy just before dark the pilot pointed to a large junk to

seaward which was tacking about in a suspicious manner. The gun-boat gave chase and ran close to her. The Cowloon Commissioner hailed her and insisted on her putting down her sail, and when this was not done he begged that the gun-boat should fire into her. Of course his request was not complied with, and no offensive measures taken. The master of the junk dropped a boat and came alongside in her bringing his papers. He exhibited a register from Wênchang and a clearance dated the previous day from Lingshuy. He was bound with a cargo of white sugar and rattans for Tungping on the coast of Kwangtung province. There was no further doubt as to the honesty of his voyage, and after lecturing the Commissioner for his precipitancy the Commander apologised to the junk master for the inconvenience caused him, and we put back and entered Lingshuy.

We spent March the 10th and 11th at Lingshuy. "The anchorage off the bar is much exposed, and there is not sufficient water for junks of any size to cross it. There is a reef of rocks off the S.E. extreme of the bay supposed to correspond with the three detached rocks laid down on the chart. They appear to be all above water. We anchored in 5 fathoms with the south extreme of the land E.S.E. and the entrance to the lagoon N. by W., the former being distant about one mile and the latter two. The lagoon is of an oval form running N.E. and S.W. It is very shallow and filled with coral and sand banks. The passage through it to the village is very intricate. A small river runs into it. There is a good watering-place on the point close to the anchorage." The anchorage seems constantly exposed to a swell from the sea, and the sea breaks in rolling surf over the small channel through the sand which leads into the chief port of the Lingshuy district. On the south bank of the lagoon about a mile from the entrance stands a small thatched village with a few junks anchored off it controlled by a Sinkwan. This anchorage is called the Sintsunkeang, or new village anchorage, and further up occurs a second junk anchorage with another small village called Tungtsekeang, or tar and paint anchorage. At the head of the lagoon about 4 miles from the entrance is found the landing village for the district city known as Seao-chai. The south side of the lagoon consists mainly of a raised sand-bank, but on a somewhat lower level cultivated fields intervene between it and the distant hills. Cocoanut trees occur in greater or less number about all the hamlets that sprinkle the valley of the lagoon. A little palm-swift (a new

species) and tiny sun-birds (also new to science) were here the most noticeable birds. The former dashing about with rapid flight over the tops of the tall palms, and the latter twittering on the tops of bushes displaying to advantage in the sunlight their gaudy metallic hues. On the sands a large long-tailed lizard could not but attract the attention of the most unobservant. It was dark olive-coloured covered with white spots, and its red costal skin hung loose and was capable of expansion between its fore and hind legs. With these false wings it would skim along the sands when disturbed, and on reaching its hole stop short at the mouth, take a glance around, and in an instant pop below. On the north side behind the strand and a village with a little cultivation around, a series of wild bush-clad hills succeed and extend to the anchorage. These abound with jungle-fowl, francolin, small deer, and other game. We found a grave-mound strewn with cock's feathers, which must have served the jungle birds for strutting on; and at sundown the cover resounded with the cries of the francolin, the grunt of the muntjac deer, and the noises of various wild animals. Parts of the lagoon were choked with corals of different kinds, and in the shallows near the shore the water shewed numbers of a plant-like object of a flesh-colour resembling somewhat in form the horse-tail weed *(equisetum)* and about a foot high, conjuring up a fancy of a miniature submarine pine-forest. At a touch each stalk absorbed its leaves and sunk into the sand. The effect was curious, and like a fairy whimsey worthy of Gulliver, to see the Lilliputian forest disappear before our Brobdignagian legs as we waded to the shore. What looked like a plant was really an animal protruded from its tube hidden in the sand. Unfortunately we did not collect specimens, thinking that we should find them in the other harbours we were about to visit, but they never came again under our notice.

We pulled up to Seochai about noon of the 11th and walked to the city of Lingshuy hien. The road lay first across a plain of fine coral sand, and then through fields of sweet potatoes traversed by two small streams. Rice fields in well advanced state occurred near the suburbs. Outside the city at the foot of a hill we noticed two curious temples, the handsomest and quaintest one being dedicated to Confucius. The main street of the town and part of the outside road to it are paved. Within the walls the aspect is that of a deserted village. We called on the magistrate—Lingshuy Hien—an intelligent Kiangse man, who had been some time in Canton and was well acquainted with foreigners. He com-

plained of the miserable dulness of the place, and the want of society; said his three years were up, and that he longed for his relief. He told me that the sugar, the main produce of the place, was grown among the Le hills by Chinese farmers who employed the Le as labourers, and that there were seventeen sugar farms. That the Le were more independent since the Nychow and Wanchow outbreaks, and did not come forward so readily to work as they used to do. The Le in this district are distinguished by the Chinese as the Seao-le. They submitted at an early date to the Chinese rule, but were allowed to retain their own peculiar coiffure. The benefits of the public schools were extended to them and two Sewtsaiship (degree of B. A.) set apart for their most worthy scholars. But they do not seem to have appreciated Chinese education, and no member of the tribe has ever won a degree. The mandarin assured me that nearly every one smoked opium, even the Le, to ward off the deadly malaria that prevails amongst these hills. The importation of opium was irregular, and it was being retailed at three half-pence an ounce. The mandarin himself snuffed and was suffering great inconvenience for the want of it. Most of the necessaries of life were brought from the adjoining districts, but Lingshuy produces the best white rice in the island. No tobacco is cultivated there. The Le bring out fuel, timber, and a few skins. They could not be induced to bring deers' horns. We rambled through the north gate to the market street outside in the suburbs. This was the market for the Le. It consists of a fine long street with great display of Manchester and other longcloths, and nicknacks of all kinds such as the Le delight in. The duty-farmer lives in this street, but he has an agent at Seochai on the harbour. A few very dirty Seao-le, male and female, were making their purchases. They are smaller and darker than the Le at Taipingsze in the interior. Their rags are broader and banded, their heads turbaned, and each carries a large wood-cutter's knife in a basket fastened behind by a girdle round the waist. Their women were very ugly and frowsy, and dressed in a skirt reaching a little below the knee. They always made off when they saw us, the Chinese hooting after them. The mandarin receives the market and street dues as part of his emoluments, but he complained greatly of the poverty of the place. He was not in good terms with the merchant who held the monopoly of trade duties. The military authority was away on circuit among the hills, so we did not meet him. The long market street

ends on a bank, below which runs a small river that enters the country further southward on the coast at a place called Paoting. Cocoanuts lined its opposite shore, and beyond towered the jungly hills the home of the Seaole. The view formed a very pretty bit of oriental landscape. We returned at dark in chairs to the boat. The boats that enter the lagoon through the surf are made of planks stitched together with strips of rattan, and are sculled like those we saw near Nankin island above referred to.

When landing at Seochai on our visit to the city we were hailed from a junk. The person calling to us turned out to be a Hainan Chinese that we had picked up at Hongkong with a slight knowledge of English who engaged on an advance of wages being paid to him to serve as our interpreter in Hainan. The proprietor of an opium shop in the colony stood guarantee for his honesty. A day or two after our arrival in Hoihow while out shooting this man asked leave to visit his mother, a very common plea for absenteeism in China, and we let him go. We never saw him again till on this occasion. It was on the hurry of embarking at Hongkong that I was forced to make shift with such a man as the above, for before leaving Amoy I had already procured a tolerably good Hainanese. The latter however was led away by the temptations of the gay native society in our colony, and not having sufficient means to pay for his dissipation he was seized and stripped of his clothes. My other men helped him out of his trouble and to show his regret for the past and as a punishment to himself he chopped off the first finger of his right hand. This act of desperation so frightened my followers that they condemned him as a dangerous character and protested against his forming one of our party. This led me at the last moment to seek for a substitute in Hongkong which resulted in my engaging the other. Fortunately as it turned out we did not feel the want of a special interpreter of Hainanese. The mandarins and their underlings could all speak some sort of court dialect and they for the most part interpreted between us and the people; moreover Hainanese itself has so much in common with the Amoy dialect that by a little attention it was not difficult from one's knowledge of the latter to make out a good deal of what was said.

We left the Lingshuy anchorage at daylight of the 13th March, and three merchant-junks that put back the evening previous having reported that two pirates outside had fired on them, we were on the alert. We came up with the pirates at sea, a large

Macao junk and a smaller Hainan junk. The big junk dropped a boat full of men who pulled as hard as they could for the shore. The gun-boat pursued and took them on board, as well as those that remained in the junks, 44 in all. The big junk had a false register dated in the 7th year of the so-called reign of Taiping (rebel), and it would appear had captured the smaller junk; for the latter had a proper register from the magistrate of the Wên-chang district, and a clearance from the same dated seven months back. As far as we could make out nine of the captives had formed the crew of the smaller junk. We took both the junks in tow and proceeded. This little event unfortunately prevented the gun-boat from visiting Gealing bay, but all the points &c. marked in the chart appeared to Lieutenant Domvile to be quite correctly laid down. "We anchored on the east side of Yulinkan bay. The water is deep, but there was a long swell rolling in from the southward, which did not make it a comfortable anchorage. Fresh water can be procured from a stream close by, also as much wood as is required, the natives being only too ready and willing to fetch them for a few old clothes. There is a beautiful harbour called Eleem in the bend of Yulinkan bay, which we had not time to explore, but I believe the French survey to be correct." This harbour is referred to by Du Halde in the following words: "In the south of the island, where vessels of the (East India) Company have harboured, is found a great bay at the head of which is one of the best ports that can be met with. You anchor in twenty feet of water, and at a pistol range from the shore; six vessels can pass the two monsoons there in the most assured security."

Yulinkan bay is in Nychow, or District of Ny, and is surrounded by mountains covered with gingle inhabited by the Seaole, there being only a few huts with Chinese fishermen remaining at Eleem harbour of what was once a Chinese village; the village was burnt down some years back for its connection with pirates. A few of these fishing people, men and women, came off to us in boats. They appeared to fear the Le, and would not go amongst them without us. It is extraordinary that so fine a harbour and bay should be so completely deserted by the colonists. We found the Le very friendly and got them to guide us up the hills along the narrow paths of the jungle. The cover was simply impenetrable to a European on account of its density and the innumerable species of thorny plants that abounded; but the almost naked Le with his forest-knife in the basket behind glided and crept about with

the facility of a wild animal. There was no cultivation, but stockaded enclosures occurred with traps at each corner shaped like lobster-baskets for the capture of wild pigs. These enclosures may be planted in favourable seasons of the year. We found no native houses, though we frequently came across Le men and women cutting wood. They were of the same swarthy tribe called Seaole that we had met at Lingshuy. I took a few words of their dielect and found them to differ somewhat from those of the Le at Taipingsze. Many of the men had silver thumb-rings and one wore silver pear-shaped earrings. One had a fife on which he played some pretty simple airs.

The pirates were all secured along the fore-deck of the gun-boat, and at dark when food was served out to them their hands were untied to enable them to eat. They wanted water and one of their number was set adrift to supply the others. Quick as thought he was over board swimming vigorously for the land. It was a fine tropical night and the water sparkled at each splash, so we could trace for some distance the sheen of his body as he glided along. A boat was lowered, but in vain; the man escaped.

We sailed at noon on the 14th March having the small junk in tow, and the big junk in charge of the second master in company. "Passing another good harbour on the coast we anchored off West Island at 4 P.M. in three fathoms. It makes a very good roadstead, and the island protects you from the swell we found in nearly every other harbour." The main of Hainan was about three miles off, mountainous, woody, and wild. We had a ramble over the island, and found a few fishing inhabitants who also turned their attention to cultivating the ground. The flat part of the island was grassy with some fields planted with cotton and hedged with bushes and trees. The hilly portion was mostly covered with wood. Among the rock-pools on its seaward side I found some fine live samples of bicho de mar (*Holothuria* sp.) which are collected on different parts of the Hainan coast for the market. The Chinese make a very good soup of this animal properly dried. They form balls half *holothuria* and half pigeon's egg, and of these make the soup; the *holothuria* boils into a substance much like the fat of turtle, and I must confess to my palate affords considerable relish. We had hoped to find about these rocks the birds' nests swift before spoken off, but there were no signs of its appearance. We left at noon of the 15th and arrived at Nychow about 4 P.M. "On leaving West Island we steered for the Great Cape rounding

which Nychow is reached. There is a dangerous rock off the Great Cape not marked on the chart, on which the sea breaks when there is any swell on. It bears S.W. from the Great Cape about 3 to 4 miles. The anchorage at Nychow is quite exposed to all winds between south and west, but there is a good junk anchorage over the bar of the river. The bar has only 7 feet water on it, and with southerly winds must be a very bad one. There was a little wind when we were there and there was generally a good sea on. The best way to go in is to take a course till nearly between the points, to then cross over and hug the right bank, keeping clear of the spit which runs off the point. It is a small and safe junk harbour, but very shallow in several places. The river which passes the city runs into it, but is too shallow for boats to get up." On anchoring we sent the Cowloon Commissioner and the Hoihow Deputy on shore to report our arrival, and to make arrangements for the removal of the prisoners. The next morning (16th March) some junk-men came on board to take the pirates on shore to the guard who had come down from the city for them. The forty-three prisoners were delivered over to them. Lieutenant Domvile, Captain Holroyd and I a little later pulled in through the shallow passage over the surf, and landed at the fort on the left side past the fishing stakes. The fort fired a salute, and a crystal-buttoned mandarin, aide-de-camp to the Heëtai, or General and Brevet-Commodore, of Nychow received us on shore. Ponies were in readiness and we rode to the city distant about five miles. A good part of the road kept the course of the river; Chinese were wading about the water and catching fish with baskets, or stamping about the mud and seizing shell fish with their toes. The two long straggling villages passed after landing were full of Le carrying about country produce in the shape of vegetables, fruit, firewood, &c., and we found large numbers of them in the city in an almost nude state acting as porters. The Heëtai saluted us with guns both on entering and leaving his yamun, and was very polite and kind. He told us that he had received the prisoners and had sent them to the magistrate for preliminary examination, but that the latter had refused to accept them. We called on the Ny Che-chow, or magistrate of Nychow, a very boyish-looking money-bought mandarin, who honoured us with a salute and was otherwise civil, but declined taking the prisoners on the plea that he had no accommodation for them, and that it would be a useless expense to him to send them all the way to the capital where he

would get no merit for it, as they were not captured by himself. He said that he would have to send two men with each prisoner according to regulation, and that his office had not so many men to spare. That he had only had six months of service in Nychow, and had found nothing but expense and ill-luck. No sooner in office than the troubles with the Le broke out. This of course led to a visit from the Taotai and Chintai, and all the expenses accruing to such a visit. And now we had come to saddle him with forty-three vagabonds, who would cost him a fortune before he could get them off his hands. He beseeched us to take them along, and deliver them ourselves to the authorities at Kiungchow. Gun-boats had often caught pirates off the coast before, but they always carried them away with them. We told him that we were on other service besides that of the capture of pirates, and that we simply did our duty in handing them over to the first native authority we came across. He ended by saying that as we had captured the junks off the Lingshuy coast he would take the pirates and forward them by first opportunity to the Lingshuy magistrate. The Heëtai came off next day (17th March) on a visit to the gun-boat, and had the captured junks examined with a view to converting them into men-of-war. He accepted the big junk for that purpose. A Wênchang trader was declared to be the former owner of the small junk, and to him it was delivered. A receipt was given by the authorities at Nychow to the commander of the gun-boat for the pirates delivered, and this on our return to Hongkong was transmitted by the commodore through H. M. Consul at Canton to the Viceroy. At Hoihow we learned that a rumour had reached there that all the prisoners had escaped save one, but that seven of the runaways had been subsequently recaptured by the Heëtai. The Heëtai and the magistrate at Nychow were on bad terms with each other, and this was the reason of all the trouble about the pirates. The Chintai and Taotai at the capital declared that they would bring the mandarins at Nychow to account for their shortcomings in the matter of these pirates, and the Chintai said he would order up the captured junk to serve him as a tender at Hoihow.

The surf on Nychow bar breaks in the calmest weather. In the entrance there is a raised sand bank; behind this on the right hand the trading junks huddle together in a nook. The fort called Pao-ping-tai is about three quarters of a mile higher up on the left bank. Along the sands were arranged, in pairs leaning

one against the other, a number of wedge-shaped flat punts without sides, consisting of a series of thick planks nailed together side by side. The fishing-junks go out crowded with these and drop them one by one on a calm sea to fish from. These punts are also used westwards round the Hainan coast. The boats that cross the surf to the anchorage are decked over, and have a central well for the crew to sit in; they are both sculled and sailed.

The Nychow valley through which the small river runs is about ten miles across, bounded by jungly hills, a few of which were cleared to some extent. The heat was great and the rice-fields dried up and fallow; tobacco was thriving; the sugar-cane not yet planted. Round the villages gardens occurred with sweet potatoes, ground-nuts, and vegetables. As at Lingshuy sugar is here the great staple of trade, and is grown with the assistance of the Le. We entered Nychow city by the sea or west gate, passing on our way a handsome temple, and then through a village-like suburb with several sugar factories. Within the walls the city looks ruinous and deserted, but emerging from the east gate you come at once upon a fine long street of shops in the suburb, where all manner of tempting and coloured goods are exhibited. This part is crowded with Chinese, and much visited by the Le of the adjoining country round. The merchant who farms the duties lives in this busy street and collects his tithes on the trade; but the toll on opium and the port dues are assessed at the landing village by the fort. The city wall has only three open gates, the north gate being blocked up on the model of Kiungchow city.

The Le that frequent Nychow and the villages about live amidst the surrounding jungle, their dwelling places being approached by creeps rather than paths. They call themselves K'lai, and I found that their language differs dialectically from those of the other two tribes already noticed. Both sexes are dark and with their betel-stained lips look very like Malays. They have high cheek bones, bushy eyebrows, and rather sunken horizontal eyes; some are large-boned with big heads. They do not crowd round you curious and inquisitive like the Chinese. All have a nervous and shy expression about the face, and try to avoid notice. The Nychow Le are a good deal darker than the Le of Taipingsze, and dress their hair differently. The knob on the top of the head instead of being a lump of drawn up hair forms a whorl, the back hair being twisted into a tail or two tails and led up to it on

one or both sides of the head, and a pin, usually of monkey bone, mounted with silver, secures the knob. Over the crown a cloth is usually wrapped in turban form. Their native dress seems to be merely a rag descending in front from a string round the waist, and passing between the legs ascending to the waist-string behind; these groin rags vary in width. They rarely wear the front and back aprons worn by the central tribe. You sometimes see them with jackets, but these are of Chinese pattern. The women wear their hair oftenest loose and hanging, but also gathered into a knot behind; the head frequently turbaned. They wear the Chinese jacket and a skirt cloth to the knee. The married women tattoo their faces in double line down either cheek and across the chin, with a row of diamond-shaped or round spots between the lines. The tattoo seems to be badly done and obliterates before the person gets old. The females of these southern Le that we came across were extremely ugly and dirty. Their houses are of thatch without walls, the roof sloping on either side to the ground, and they contain but little furniture. They live together under their own head men or chiefs who are responsible to the Chinese authorities, but their submission is by no means complete, as they have never consented either to shave their heads or to wear trowsers—both marks in the eyes of the Chinese of unpardonable barbarism. In each village a separate building is set aside for the storage of grain and other joint property of the tribe. Marriage is celebrated with rejoicing and the presenting of betelnut, and the husband goes over to the wife's family. They marry but one wife, and are usually strict in the behaviour of one sex towards the other; but on occasions of feasts and merry-making their morality gets relaxed, and improper scenes occur. The dead are buried in coffins made of hollow trunks of trees, and wakes are held over them. The Nychow Le share with the Seaole of the south-east the offer of government education, and many attend the public schools, but not often with success. The Secretary to the General at Nychow, to whom I am indebted for most of the above notes, informed me that some years ago a Nychow Le attained to the degree of Sewtsai or Bachelor of Arts, and held office under the Chinese government. This was the only instance he knew of a successful Le student; the better classes of the Le preferred the wild life of the mountains, and had no taste for literature. A wild berry was shewn me from which the Le infuse

a kind of Tea much used among themselves.* In carrying loads they have adopted the bamboo pole of Chinese porters. I was anxious to visit the interior of Nychow district, but the mandarins recommended me not to do so, as the Le since the outbreak were in the frequent habit of making raids and plundering the Chinese. The outbreak was brought about by a disagreement between the Tsungyay stationed at Logansze and the Le he had a nominal control over. It was an old rule that the Le should contribute labour to keep in repair the mandarin's offices and the town wall. The former Tsungyay had not demanded this labour, but had the work done at his own expense. The new man reverted to the old rule and insisted upon the Le coming forward to work. The Le pleaded that the old rule had been abolished, and that the system in force was to pay for the labour. The Tsungyay led out thirty soldiers to compel them to comply. The soldiers are said to have taken liberties with the Le women, which resulted in the Le blowing horns and calling to their assistance their independent brethren from the mountains. The mandarin and the soldiers were taken prisoners, and the whole of them were massacred. The Taotai and Chintai of Hainan journeyed to Nychow and called on the Le to surrender the murderers. This the latter refused to do, and the high mandarins had to return to the capital without effecting a pacification. The opinion of the mandarins now is that their prestige among the Le will never be reestablished unless the government allow them to move an army against the Le and thoroughly punish them for their presumption and perverseness. In a jungly mountainous country like that at Nychow field operations are not easy and a large number of men must be sacrificed before much can be done against these hardy mountaineers. The malaria too, to which we have before alluded, few Chinese can stand. It affects them with a kind of dropsy, to wit swelling of the belly and limbs, which mostly prove fatal. Some attribute this to the hill water; others insist that the Le poison their water and tea; while others lay the cause to a power that the Le are supposed to possess of working deadly charms. The Le use knives and spears, but their chief weapon is the bow and poisoned arrow. The string of this instrument is usually made of a bamboo strip, and can propel with great force, but the arrow

* These berries appear to be the seed of the Galangal (Alpinia officinarum, Hance) a plant that grows abundantly in the south of Hainan.

is not feathered and cannot fly straight for any distance, consequently their practice in the chase is to creep close to their prey before pulling the string. The wounded animal is followed up until the poison of the arrow-head effects its death or stupefaction.

The Chinese in Nychow city speak a very corrupt kind of mandarin or court dialect, which tradition says was originally taught the people by the poet and statesman Soo Tung-po, who was exiled to Hainan. Those in the surrounding country are from different parts of the Kwangtung coast. The district is very thinly colonised, the Le or their half-caste descendants predominating.

The carts in use at Nychow are much like those of Lingshuy. They are very narrow, little over a yard in width, with movable basket or hurdle sides, and with nearly solid wheels which turn with the axle and make a dreadful creaking.

About 3 miles north-west of the city near the hill range occurs a hot mineral spring. The river which passes Nychow is here reduced to a little stream, and close to it is a small basin just off the road which contains water about a foot in depth and almost too hot to keep your hand in. There was a slightly bitter taste about this water, but it had no sulphurous or other smell, though out of the hot sand at its bottom we picked out a sulphurous-looking pebble. The General's Aide-de-camp that guided us thither told us that a similar spring occurred in another direction from the city.

Monkeys abound in the Nychow jungles, and we saw on one occasion a party of large brown deer. Jungle-fowl, partridges, quail, &c. are also numerous, but the cover is too thick and impenetrable to afford sport. Most of the tropical birds of the interior range down to the sea in this hot and jungly district.

We left Nychow on the 20th March at 5 A.M. under sail with a good southerly breeze for Paklai, 80 miles distant on the west coast. "From Nychow to Paklai a series of sand-banks occur, which vessels of light draught can go inside or outside of. As we were under sail the pilot took us outside. It would be impossible to give any course as the pilot hauled in and out as we shoaled the water. The most dangerous bank is about 35 miles from Nychow, and the pilot did not appear to know it was there till the breakers were seen from the deck. It is about ten miles from the land and where it forms an angle. Nearly all the banks break, and you can generally tell by the colour of the water and gradual shoaling of the soundings when you are on the edge of

them. In fact the pilot appeared to keep in about 5 to 7 fathoms on the edges of the banks. The nature of the land is a flat sandy plain with very high land in the distance. Off the greater part of the land it runs very shoal. Pyramid point is very well named; it runs out low and sandy with a pyramid-shaped rock on its extreme end about 50 feet high, on rounding which you enter the bay. See-ka-sha marked on the chart as a village is really the north point of the bay. The village or small town of Paklai gives the name to the harbour although it is over two miles inland. The anchorage is off a small fishing-village at the head of the bay, the water gradually shoaling up to it. You must look out for a very nasty little reef off the village, which only breaks at low water. By the course we steered the outline of the land laid down on the chart must be incorrect."

We anchored in the evening, and next morning (21st March) pulled round the spit into the small creek, wherein the junks were lying; we landed on the left and walked to the village a few hundred yards off on a sand-mound just above the head of the creek. It consisted of straw huts with narrow lanes between and abounded in pigs, poultry, and filth. The Sinkwan that controlled it had gone to Nychow. This place is called Tuntow-kang, and is two and a third miles distant from Paklai of Peh-le-keai (street of the northern Le) which lies in a south-easterly direction. We walked to this town through a scorching wind blowing from the south over the sand. It consists of a long street and was formerly one of the bartering places of the Le. The Sinkwan was absent so we visited the Kwanpoo or Custom House, and saw the agent of the duty farmer, a pleasant lad who treated us with great civility. He informed me that Paklai was in the Kangên district, though its sea-port Tuntow-kang was in the Changhwa district. Paklai was seventeen miles distant from Kangên city and twenty-three from Changhwa city. Tuntow was a port for both Kangên and Changhwa, but each city has a small shallow port in its neighbourhood as well. There were only shops and small agencies at Paklai, no large hongs; but the very tolerable Hwey-kwan or meeting-hall of the merchants of Nanhai and Shunteh (districts in the Kwangtung province) seemed to show that the better class of traders did occasionally resort to this town. We walked through the street, and crossing a stream continued round to a low range of pyramidal hills, resounding with the notes of the spotted partridge, that runs to the coast. The country was extremely dried

up; a few patches of sweet potatoes were seen, and there were some large herds of cattle and goats. The villages were small, few, and far apart, and the fields divided by hedges with broad cart-roads between. There were trees round and about the villages, especially about the fishing villages near the coast; Tuntowkang being alone an exception. Some handsome specimens of the Tamarind tree occurred; this very graceful tree thrives all over the island, but in this place it showed to advantage; its preserve-like seeds are eaten by the people. Some of the fields were being prepared to plant dry rice. The earth was sandy, and the whole country looked parched and dry. The inland hills, where the Le frequent, seemed to be about eight miles distant.

We left at 5.30 A.M. (March 22nd), and "steered between the sands marked on the chart off See-ka-sha point; they seemed tolerably correct as laid down, but the lead and the eye are the best guides afterwards. We followed the land taking care not to keep too close, as the water shoals in places. The walled city of Changhwa close to Bluff point gives a junk anchorage, but no ship could lie off there with safety. After leaving Bluff point you can safely keep within two miles off the land in about seven fathoms till you reach the mouth of the little harbour of Hoitow." The hill range that ends in Bluff point is clear of wood; sand runs up its face on the seaward side. Large numbers of fishing junks came out of the Changhwa anchorage as we passed. They carry one mast and have the mat main-sail well rounded on the outer edge near the top, as if the gaff and the mainsail were run into one. They carry their heads out of the water and have their stern-peaks whipped round with rope. One net is hauled between two junks, the net of each being used alternately. Rope fenders are hung over the junks sides to prevent injury from collision. As we arrived off Hoitow it began to blow and looked stormy. The fishing junks, some hundreds in number all made for the same port.

The harbour of Hoitow (sea head) is in Tanchow, or the district of Tan, and "is formed by a small river the mouth of which is a kind of lagoon covered at high tide and dry at low, except a little corner formed by a sand-bank which gives the harbour. There are only 2½ fathoms on the bar at low water and you anchor in about the same inside, and moor with a stern anchor. The gun-boat completely filled up the harbour in turning. There is deep water close to the village, or on the west side, and the junks moor

alongside the banks. It is the largest fishing station on the coast." The village situated on the left bank contains a good many straw-thatched huts with walls constructed of coral and bits of volcanic rock, and at its further extremity some more solid houses of brick and tiles. The creek continues to the left along the village, but soon shallows, and becomes a fresh-water stream. Inside the shallower portion of the creek the fishing junks packed themselves and others kept hurrying in till a late hour in the night. The three or four trading junks were moored to the shore inside of the gun-boat.

(March 23rd). The Sinkwan was away, so we called on the master of the Taiseun hong apparently the only large merchant in the place. He had a snug house with a druggist's shop in front on the street, an upper story above with a verandah commanding a good view of the country. The merchant held a small civil appointment under the Chechow (or magistrate) of Tanchow, and before farmed the duties. He said the government sold the monopoly of collecting these yearly for $400, the purchaser having besides to pay to the retiring holder $200, or in all $600. He showed me some specimens of copper ore (green carbonate of copper) which he informed me came from a mine in the Shih-luh shan (stone-green hill) distant about 27 miles east, and behind a small group of low bare hills about 13 miles off which we could see from his window. The mine is surrounded with jungle and inside the Le territory. This mine I found on my return to Hongkong to be well known to certain Europeans there, who once made an ineffectual attempt to get Chinese to work it under the sanction of their government, and to sell to them the ore. Certain Chinese did get the permission of the high authorities at Canton, but objection being made to foreign steamers going to the port to load with the mineral, the scheme was abandoned. The ore has been tested in England and found to be well charged with copper. The merchant further informed me that in the same group of hills lead and iron both occurred, the former containing ten to fifteen per cent. of silver. The silver I had already heard about from a mandarin at the capital, who had been employed to work the mine on account of government; the expenses of working were found to be so great and the return of metal so small that the mine was sealed or closed in the first year of Hienfung (A.D. 1850). The older writers on China speak of gold as being one of the articles brought out for barter by the Le, but I could learn

nothing of its occurrence now. At Taipingsze the gravelly soil was sprinkled with some shining specks which my men mistook for gold, but they turned out to be small fragments of yellow mica. The merchant at Tuntow said that he fully believed from indications he had noticed that coal also lay in the neighbouring hills, but it had not as yet been discovered. The valuable metals and minerals are only found among the hills in the possession of the Le, and in places where the Chinese cannot penetrate without their permission and assistance. The merchant traded largely with them, and kept one in his house as an attendant. He however declined to guide us to the hills without permission from the Tanchow authorities, as he had already suffered so much from his former connection with Europeans in mining operations. To proceed to Tanchow and return was out of the question as we were pressed for time; and to go inland without a guide or person conversant with the peculiar dialect of the colonists here and the language of the Le was also impossible. Cantonese was not understood out of the harbour, and our attendant mandarins spoke between them only Cantonese, Hainanese (or the language of the northern portion of the island) and mandarin; the weather was rainy and stormy, and conveyances difficult if not impossible to procure; so we reluctantly abandoned our desire to visit the different mines. While the mines were worked the two forts on the sands above the village were manned and kept in order, but they had long since been deserted and fallen into disrepair; and now notwithstanding the presence of the gallant Sinkwan, pirates, the merchant assured me, frequently came inside and levied blackmail.

The Le servant in the merchant's house was a fine tall man but with an effeminate cast of countenance and the shy look before noticed. He was much fairer than the Nychow Le, and the list of words he gave me bespoke a language different from the three we had already noted, though evidently only dialectically so, and not a distinct tongue as you find among neighbouring tribes in Formosa. When summoned forward he took a seat on a stool at the feet of his master, and looked foolish and childish. He belonged to a tribe called Laokwang, and though dressed in clothes of a Chinese cut retained the coiffure of his tribe which was similar to that of the Nychow Le. The merchant told us that not many years since the Le set up an Emperor, but that the Emperor exacted so much from his subjects that they rose against him and dethroned him. That now they are organised as before under

chiefs. We had a ramble into the country and found the plain sandy, and not much under cultivation, except with sweet potatoes; many fields lay fallow. Off the harbour in the left bank there is a little inlet wherein the small harbour boats find refuge. These are a good deal like Macao sampans, and are sculled by women who speak Cantonese and wear kerchiefs round their heads.

We sailed on the 24th March about 9 A.M. "Hoitow is only fourteen miles from Flat Point leading into Chappoo bay. The latter is a large open bay with a reef in the centre, which is not marked in the chart. In the north-east corner is a little harbour called Heongpoo formed by reefs, and the least water going in is four fathoms. It is perfectly sheltered from all winds, and is the best harbour for vessels of moderate size that there is on the coast. There is a small sand-bank on the right hand going in. Beyond the harbour is a large lagoon with a fort on each side of the entrance. It is possible to go just inside, but there is no better shelter than off Heongpoo, and the lagoon is full of sand-banks. Heongpoo is only a small fishing village."

On our way to this port the pilot pointed out as pirates three fishing boats stranded on the beach, and the Cowloon commissioner and the captain of Hoihow's deputy requested Lieutenant Domvile to overhaul them. As we approached the crews deserted the boats and took to the shore. The commander of the gun-boat landed with all his available men and gave chase, our two mandarins with him. When the pirates were sighted the young mandarin deputed by the captain of Hoihow turned and ran back to the beach in great fright as hard as he could run. The "commissioner for the suppression of piracy" sent by the Chinese Commodore of Cowloon kept with the party. When we afterwards reported this exhibition of the "white feather" to the authorities at the capital, they made light of it on the score of youth and said that he would grow braver as he grew older. The pirates collected on a mound under a tree and waving flags defied the gun-boat's crew, but a few shots soon dispersed them, and in their hurry to escape they dropped their flags and two French muskets. It was no use attempting to take them prisoners, so the party returned on board after burning the three deserted junks. A small boat containing three men was with the junks. These men declared that they had been ten days in the hands of the pirates and were held to ransom. They were allowed to depart with their boat in peace, and we found them afterwards quietly anchored at Heongpoo.

Heongpoo, or Yangpoo harbour which we reached at 6 P.M. is at the mouth of a large river-like creek. It is in Tanchow, or the district of Tan. The village that gives the name to the harbour is situated on the left near the entrance to the creek, and is controlled by a Sinkwan. It is the head-quarters of a large fishery for red fish *(Chrysophrys major?)* The fishing junks were somewhat like those of Hoitow, but with the head less out of water, their mainsails cut straight, and their stern peaks bent round and meeting upwards but not bound round with rope. To reach Tanchow city it was necessary to go seven miles up the creek to a town called Sinying, and thence by road seven miles southward. We made for the city on the following day at noon, the Sinkwan of the port acting as our guide. Inside the creek there is deep water, but the anchorage outside is preferred by the junks. The smaller junks that belong to the country go up the creek and moor off Sinying. These junks of about forty-eight tons burden much resemble those of Poochin and Chinlan, and are employed on the small coasting trade done from this port. The right shore of the creek (going in) is sandy, the left covered with small boulders and pebbles, mostly of a dark volcanic tufa. There is a dilapidated fort on either side of the creek near its entrance. The Sinkwan said that it was his duty to live near the forts and look after them, but that he had not sufficient men to hold them against the pirates who had threatened to carry away the guns. The guns were therefore removed and the forts allowed to decay. We were obliged to hug the left bank till well up the creek before we struck across, in order to avoid a sand-spit in the centre running out from Sinying. Sinying is a thriving-looking town, most of the houses being tiled, with sides and walls of volcanic rock and coral. It straggled along the creek some way. There were several smaller clusters of houses on the same side of the lagoon, and a few also on the left side. We did not have time to send to the city for conveyances, so had to walk. It was a long, sandy, dreary, uninteresting road to the city, often between hedges, but oftener through open fields. Sweet potatoes, sorghum millet, and melons were growing, and a little vetch and dry rice, but the paddy fields were dried up and fallow. We passed over two small bridges. Many of the cattle were brindled, and the carts broader than they were further south. The country women here have a curious and unbecoming fashion of wearing a strip of unbleached white cotton-cloth across the hair of the forehead and tied behind under a huge knot of

twisted hair looking like a "chignon," stuck through with pins. The white cloth was worn also a good deal by the fisherwomen, one of whom was generally to be seen in each boat in company with the crew. Their earrings were the large brass rings worn throughout Hainan, but with the knob that stands in front of the lobe of the ear conical instead of round. Many of the men wore white frocks. The light straw hats of the women had peaked crowns and broad brims, some with a deep fringe, differing from those worn by the country maids at Nychow and Lingshuy, which were made of softer material and had deep fringes of blue calico. We entered the south gate of the city, outside of which there were no suburbs, and soon reached the Yewpoo's yamen. The Yewpoo, or military captain, had a red button for distinguished services against the Nankin Rebels. He was civil, but not entertaining. We visited also the Chechow, or magistrate, an Amoy man only lately arrived. He knew little of the place himself and called his secretary to tell us something about the trade. The city has four gates, and a fine but worn Confucian temple. Most of the houses look respectable, but there is a poor village-like appearance throughout the town. The sun was setting and we could not get sufficient chairs to accommodate our small party, so we had to hurry on our return walk. The mandarins had given us no refreshment, and we plodded over the heavy sandy road in a very jaded condition, not reaching our boat till late. The people of the city like those of Nychow are said to talk mandarin, the ancestors of both having been taught by Sootungpo. From the jargon they now speak I am afraid they do not do much justice to their worthy master. The mandarins gravely informed me that the villagers spoke the Le language. This was not the case; their language sounded like a dialect of Cantonese, with a frequent use of the initial consonants "d" and "b." We met no Le, the hills having retired to about twenty miles from the coast. The copper mines were said to be about 60 miles from the city and the military mandarin offered to assist us into the country, but the weather was too stormy and our time too limited for such an expedition.

Bad weather prevented us from leaving Heongpoo till the 28th when starting at an early hour we reached Haosuy harbour at 4 P.M.

"On leaving Heongpoo you round Pillar Point so called from a pillar-shaped rock on the west side; there is also an extraordinary rock joined to the mainland by a reef which extends

round it but close to. The next point is called Ping-ma-kok or Double hill, and can be seen for some distance, it is about 800 feet high. After rounding this you are in the bay of Haosuy. The island called in the chart 'sand-island' is continued by an extensive reef which forms a most excellent shelter in 5 fathoms; the entrance inside the reef to the northward is narrow, but the entrance to the southward is open. The village of Haosuy is on the east side of the bay, and there is a small river running. The anchorage off the village is not so good as that inside the reefs as the swell rolls along the coast. There is a remarkable hill on the south-east side of the bay, which would make a good land mark if correctly laid down in the chart; after leaving this the land is quite flat." The so called village of Haosuy is in fact composed of three small villages lying adjacent, the one right in the bight is called Antseuen; the one on the left Sinying; and that on the right Haosuy (head and lips). We landed at Haosuy and learned that the Sinkwan of the port had been withdrawn. We were led to the residence of the collector of the Opium toll. Haosuy harbour is in Linkaohien or district of Linkao, the chief city of which is fifteen miles to the eastward; to reach it one has to pass a mile or so up the river-creek to the town of Panchow, whence a road leads to the city. The harbour held no trading junks and showed no signs of trade. We rambled through Haosuy and out at the back; a few villages with trees about them were scattered beyond; the river ran fast but grew shallow before advancing far; it is said to divide further up, one branch extending towards Linkao city and the other towards the city of Tan. Most of the houses that we saw on the river bank had tile-floored salt-pans with straining mounds for the manufacture of salt. The soil was sandy, growing groundnuts, dry rice, and vetches; many of the fields lay fallow, a few only were ploughed. Blocks of volcanic rock and masses of fine-grained granite were scattered about confusedly; both are used for building; some houses were tiled, others only thatched, and the people seemed in moderate circumstances; their language sounded a good deal like that of the colonists at Heongpoo, and they dressed in a similar way. Their harbour boats are sculled by a stern oar, some being decked for the surf like those at Nychow.

We steamed out of Haosuy bay on the 30th march at 6 20 A.M. and reached Hungpai at 11 A M. "This little place is about 25 miles further along the coast in a series of shallow bays. It is a small harbour formed by reefs, but runs very shallow inside. It

is a great place for piratical junks and the villagers are of doubtful character. Between Haosuy and Hungpai the water runs very shoal off the points, but the lead will always give you warning in time." Hungpai or Kungpai is in Chengmai-hien, or district of Chengmai; the country here is low with a reddish-brown clayey soil, undulating gently with one or two prominent isolated hills. The right point is rocky with a small fort on it and trees in the distance; the left side sandy and undulating; the creek between full of oyster-covered rocks. Behind the ship to seaward was a low sandy island with a single conspicuous tree upon it; on the left shore there were several small villages with only a very few small fishing boats. The nearest naval authority (Sinkwan) was stationed seven miles away. We landed up the creek on the stones of the left shore and had to wade to land. The villagers spoke quite a peculiar dialect unlike any that we had heard; they were not on friendly terms with one another, following us only to the boundary of their own land. A little cotton was observed growing besides the ordinary sweet potatoes, vetches, groundnuts and so forth, and fields for dry rice were in course of preparation. Our pilot and Chinese attendants kept close to us on shore and would have nothing to do with the natives, as the latter were reported to be thieves and vagabonds. There were no signs of trade among them, and this good harbour seemed thrown away, or rather deserted in favour of pirates and a lawless population.

About twelve miles beyond Hungpai there is another safe anchorage protected from southerly winds called Mahnoo also in the Chengmai district, but beyond again none others occur till you reach Hoihow.

We departed from Hungpai at 6.45 on the 31st March and anchored in Hoihow harbour at 12.15. The coast we passed was sandy with a slightly raised flat country behind.

The mandarins of the capital were glad to see us back and congratulated us on our successful cruise. The Chintai begged me to acquaint the high authorities at Canton with his helpless position as regarded piracy. That not having any men-of-war under his command, he was obliged to charter merchant junks to proceed against the pirates when they annoyed the trade of the harbour, and as these junks took some days to get ready the pirates always got wind of his intentions and kept out of the way for the time. He said that the officials and people of Hainan were under great obligations to the gun-boats from Hongkong, which alone could

cope with the pirates and he was always glad to see them down for a cruise. The Tsanfoo, or captain of the port of Hoihow, who gave us a complimentary breakfast before we sailed, said with a smile and a sly look "you must not tell the grandees at Canton that you breakfasted with the Tsanfoo at Hoihow *on shore*, say it was on board his war junk!"

The servant we left behind at Chinlan came on board, and we prepared to return to Hongkong. We put to sea on the 2nd April but the weather continuing stormy we ran across the straits and anchored under the land of the Luichow peninsula opposite. The country here was of a similar nature to that about Hoihow. The rest of our course back was not far different from the one we took coming. Our fuel getting exhausted and the baffling winds continuing we put in to Macao for coals, and dropped anchor in Hongkong harbour on the 11th April at 7 P.M.

I was particularly anxious to visit Lienchowfoo at the head of the Tonquin gulf to have a look at the land and ascertain its commercial capabilities, and had with me a letter of introduction from the Viceroy at Canton to the prefect of Lienchow, but our time was limited and the weather unfavourable.

I have already related that while I was exploring in the interior the gun-boat was in pursuit of pirates. The chase took the gun-boat into the gulf of Tonquin on which Lieutenant Domvile has favoured me with the following notes: "We paid so hurried a visit to the gulf of Tonquin that it would be impossible to me remarks of any value, but from what the pilot said there appear to be no more dangers than those laid down in the chart except close to the islands on the Cochin-China coast; and the the distances from port to port appear to be out by our run to Backhai (the port of Lienchow city) at the head of the gulf. The islands to the northward of Gowtow are more numerous than laid down in the chart, but occupy about the same space."

Lieutenant Domvile finishes the nautical notes on our cruise, which he most kindly put at my service and most of which I have introduced into this narrative, with the following remarks: "In many cases the courses we made following the land round Hainan would have put us inside the island showing that the coast-line is considerably out. Also between Naochow island and Tienpak the land extends a great deal further to the northward than laid down. In numerous places on the coast of Hainan there are distinguishing features such as high peaks, entrances to rivers, pa-

godas and so forth which would be of great assistance in navigating round the island if correctly laid down in the chart. Some of these have been added to the chart, but the placing of them is of necessity merely approximative, and in no case could the correct height of the hills be determined. At present no vessel, not even a gun-boat, should attempt the voyage round the island without having a pilot on board. The greatest inaccuracy is the drawing of the line of the west coast, which is placed too far to the east and slightly to the southward, the difference being made up by the part of the distance from Haosui to the N.W. point of the island, which is considerably less than the chart shows."

ARTICLE IV.

CHINESE LYRICS.*

By GEORGE CARTER STENT.

FAMILIAR as we may be with some of the Chinese customs, through reading such books as "The Middle Kingdom," or "The Social Life of the Chinese;" those works, valuable as they are, full of strange customs as they may be, fail to give us an adequate idea of the inner, or private life of the Chinese. We are all aware that the Chinese are, as it were, an isolated race, and will not allow the privacy of their homes to be ruthlessly invaded by their own fellow-countrymen and friends, much less by foreigners. How then can we obtain a knowledge of their every-day domestic life? How know anything of the thoughts, sentiments, feelings, affections, actions, and the thousand little nameless nothings that help to make a Chinese home? Who, with all their practical knowledge of China and the Chinese, can venture to affirm they know all this? Chinese are very chary of mentioning anything connected with their homes; these are to us hermetically sealed, and for all we know of their home life, we might just as well be in some other country.

They remind me greatly of a character in Dickens' "Great Expectations;" they are all "*Wemmicks*" in more senses than one; they have their stereotyped stolid business face, and their genial home face. They may be on terms of intimacy with you in business, or otherwise, but they do not take you home to "The Castle," and introduce you to "The Aged," or "Miss Skiffins;" like him they make no mention of such a place, or such parties. We read, or hear, certainly, of love of parents to children, of filial obedience, and of brotherly love; but of the nearer relations we know absolutely nothing. Yet in spite of the Chinese custom of betrothal and marriage without the parties having seen each other; and although foreigners generally labour under the impression that there is no such thing as conjugal affection amongst the Chinese;

* Read before the Society on 5th June, 1871.

that women are mere automatons, obedient to the will or caprices of their husbands, and without any will of their own; I venture to assert that there are among Chinese women, heroines, strong-minded women, blue stockings, sentimental misses, as ever read Byron or Tupper, and above all, good, loving, affectionate wives, the same as there are in our own countries.

Under the "*Wemmich*," or ceremonial crust exhibited to outsiders, even though foreigners pooh-pooh the idea of their having such things, lie feelings deep as any we can possibly possess; the husband loves his wife as ardently as we do ours,—though perhaps in a different way, and not shewn in public, as is too often the case with us, affectionate before the world, but squabbling in private. He thinks there is something sacred in his love for wife, or home, not to be lightly spoken of, or witnessed by everybody. The wife loves her husband too, with a sort of "looking-up-to" affection; she thinks him not only *her* superior, but the superior of any one else. Shakespeare beautifully describes this sort of feeling, and the relations that *should* exist between husband and wife, in the "Taming of the Shrew:" beginning with—

"Thy husband is thy lord, thy life, thy keeper." Act V. Sc. 2.

As we are now situated, the knowledge of Chinese domestic, or home life, is only to be obtained from three sources, novels, theatricals, and songs; novels in particular. In them, foreigners can see Chinese as they really are; see the interior of their homes, have their daily life vividly depicted, even to the minutest detail; hear their endearing expressions, and gain more information of Chinese private life and manners by reading *one* novel, than spending a whole lifetime among them in the way we do. One of our greatest authorities on Chinese matters, when speaking to me on the subject some few years ago, said, "read as many novels as you can; you will get more knowledge of the Chinese from *them*, than you can from any other source. You are not obliged to read the filth; pass all that by, and pick out only the really good." I believe he was right. To obtain pearls, we must extract them from the putrid oysters, and pearls of knowledge must in like manner be extracted from their filthy surroundings. Many gems of poetry are to be met with in novels, for the best Chinese poets are quoted, and chapters are headed by appropriate verses in their novels, as in ours. A short time ago I lent a novel to a friend, who on looking at the first page, exclaimed, "why, here's Shakespeare's 'All the world's a stage!'" And there it was word

for word, in the same language as Shakespeare himself used. I have often met passages conveying the selfsame ideas, and in very similar language to that used by some of our own authors.

The Chinese have their "Joe Miller," their jest books too; abounding with wit and humour that would bear comparison with our own; too broad I admit, in a good many cases, but still a great deal is to be learnt from them. One I read lately, will show at once both the rapacity and the wit of a mandarin. I quote from memory, so I may not perhaps give it in the exact words, but as near as I recollect. "A case was coming off before a magistrate; the plaintiff thinking to influence him in his favour, went to him privately, and delicately bribed him with a present of fifty taels. The defendant also went to the magistrate on a similar errand, but gave him a hundred. When the case came off, the magistrate decided in favour of the defendant; the plaintiff, thinking the magistrate might have forgotten the circumstance of the fifty taels, held up his hand with the five fingers extended, to remind him of it, exclaiming, 'I beg your worship will reconsider the case, and you will find I am in the right.' The worthy magistrate, holding up one hand, replied, 'silence! I have done so, and although I admit you are right to a certain extent, yet the defendant, (here the magistrate held up the other hand, to represent the hundred taels,) is evidently *still more* in the right, and I decide accordingly.'" This in the original is inimitable.

Much may be learnt from theatricals. I do not mean what I should call their spectacular pieces, made up of gorgeous dresses, rant, noise, (miscalled music,) and fighting; but modern farces or comedies; in them you see a good deal of Chinese life and manners, and pick up many a quaint expression, or curious custom. A great play upon words is also often exhibited in them; absurd mistakes occurring through the similarity in the sounds of characters; so that for punning purposes, I think the Chinese language is unequalled. I feel amply rewarded, if after sitting through the din of a heavy historical, or classical piece, I see some scene of everyday life depicted.

I now come to the object of this paper on "Chinese Lyrics," or more properly "Street Songs;" for the songs I shall introduce, I have learnt through hearing them sung in the streets; in fact, I have made quite a collection in that manner. Some I have obtained for the sake of the music, which I have fancied pretty; others, for the (what I have thought) beauty of the language;

others again, for their absurdity. Here I may remark, that foreigners in this case are very like Chinese. How many songs are published nowadays that are downright trash; utterly worthless; but for the fact that some of them have pretty tunes! How many persons play the airs of, or sing, popular songs, when they know the language of them is simply idiotic! Who cares to know that

> "Captain Jenks of the Horse Marines,
> Fed his horse on corn and beans"?

Or that some individual, name unknown, "feels like a morning star!" which he takes care to repeat an alarming number of times, the only drawback to his otherwise blissful state of existence, being the pertinacious attacks of a fly, which he endeavours to dispose of summarily, by using terms at once entreating, reproachful and stern. I quote his own eloquent words, "Shoo! fly, don't bother me!" Yet this kind of song is patronised extensively; but I trust in the majority of cases, *only* for the music, which is really cheerful and pleasant; for it would be shewing a poor taste for poetry, to say one admired the language. So that however simple or absurd any song I introduce may appear, I claim that it possesses equal, if not superior, advantages to some of our own popular songs; for there is something not generally known to foreigners to be learnt from *every* Chinese song; and the music of some is positively pretty, and would compare favourably with some of our own ballad music.

As far as I can ascertain, ballads, and ballad music, first came into use during the *T'ang* dynasty,—that is, from A.D. 620 to 906. We are told, that the Emperor *Ming 'Huang* of that dynasty, thoroughly understood music, and was so passionately fond of it, that he established a school for the instruction of singers and players, and selected several hundred girls, whom he himself taught to sing, in a pear garden. These girls were called "The Emperor's pear garden pupils;" and to this day, players and singers are often called "pear garden pupils."

Songs, or ballads in Chinese, are very similarly arranged to our own; and the mere rhymist would find it an easy matter to string a number of rhymes together, on account of the construction of the language, and the immense number of characters having similar sounds; whether they could write poetry or not is another matter. Making verses is a very common amusement amongst them, and scarcely a novel could be taken up without seeing that

verse-making is described as one of their principal pastimes; some acquiring a great proficiency in it. I shall not venture to give a long dissertation on the music, or metres of the different kinds of songs; in fact, I have not been able to devote so much time to the subject as I could wish, or as it demanded; but I shall at once proceed to illustrate it with the translation of a song called "Wang ta niang," or as we should say "Dame Wang." I have perhaps been free in the translation, and have utterly repudiated the possibility of my being able to put it into English verse. But perhaps you would like to hear the tune first, and as I have no other means of illustrating it, I will endeavour, with your permission, to sing a few verses in Chinese.

WANG TA NIANG. (MADAM WANG)

王大娘

紗窓紗窓外呀　隔壁兒响叮噹
姐兒問聲誰呀　隔壁兒王大娘
王大娘進門坐在了高橙上了　一合一合咳
輕易呀不到我這個賤地上了　一合一合咳
掀開芙蓉帳啊　聞見是胭粉香
掀起紅綾被呀　瞧瞧呢二姑娘
二姑娘瘦的不相個人模樣了　一合一合咳
白二姑娘這幾天怎麼樣了呢
唱奴家這幾天哪　延延又纏纏
茶也懶怠用啊　飯也不愛餐
茶飯呀懶餐我可實難用了　一合一合咳
白與你請個醫生來瞧瞧罷
唱奴家不請他呀　奴家也不要他
請個醫生來呀　捻捻又搯搯
捻捻呀搯搯可是奴害怕了　一合一合咳

白與你請個和尙來罷

唱奴家不請他呀　奴家也不要他
請個和尙來呀　乒乒又乓乓
乒乒呀乓乓可是奴害怕了　一合一合咳

白與你請個喇嘛來罷

唱奴家不請他呀　奴家也不要他
請個喇嘛來呀　啦嘍又哇喇
啦嘍啊哇喇可是奴害怕了　一合一合咳

白與你請個叉魔來罷

唱奴家不請他呀　奴家也不要他
請個叉魔來呀　溪流又嘩喇
溪流哪嘩喇可是奴害怕了　一合一合咳

白這個不要那個不要你這個病是怎麼得的呢

唱三月三月裡呀　三月是淸明
桃樹花兒開呀　楊柳又發靑
王孫呵公子他可遊春景了　一合一合咳

白遊春不遊春與你何干呢

唱他又愛奴家　紅粉是佳人
奴家又愛他呀　年少一書生
我合他說了幾句挑情的話了　一合一合咳

白挑情不挑情不怕你爹媽知道麼

唱奴的爹爹呀　七十有單八
奴的媽媽呀　耳聾眼又花
他們那二人我可全不怕了　一合一合咳

白不怕你哥嫂知道麼

唱奴的哥哥呀　常常不在家
奴的嫂嫂啊　常常住娘家
他們那二人我可全不怕了　一合一合咳

白不怕你姐妹知道麼

唱奴的姐姐呀　和奴不欠差
奴的妹妹啊　年少不知斜
咱們那說的都是一樣的話了　一合一合咳

白與你怎麼樣呢
唱尊聲王大娘啊　認你個老乾媽
姐兒忙下跪呀　哀告老乾媽
這件那事兒與我成全了罷了　一合一合咳
白成全不了呢
唱成全那不了可是苦死咱了　一合一合咳

The translation runs thus:—

From the outside of the gauze windows,
Came the sound of a neighbour's tapping.
The girl within, exclaimed, "who is it?"
"'Tis your neighbour, Wang ta niang."
Dame Wang entered the door, and sat down on a high stool. Heigho!

Girl. "You treat me lightly by not coming oftener to my poor place. Heigho!"

D. W. Drew the flower embroidered curtains,
Inhaled the fragrance of the cosmetics,
Turned down the red damask counterpane,
Looked at the girl,
And perceived that she had fallen away to a mere shadow. Heigho!

D. W. (spoken.) "Well, Miss, and how have you been these last few days?"

Girl. (sings.) "For the last few days I have had no energy or life whatever,
With no inclination even for my tea,
And no appetite whatever for my food,
For both tea and food I have felt such repugnance that I have had great difficulty in taking them.
Heigho!"

D. W. (spoken.) "Shall I call in a doctor to look at you?"

Girl. (sings.) "I'll not call in one, for I do not want him.
If I were to send for a doctor, he would only be feeling my pulse, and sounding me;
And I am afraid of feeling and sounding. Heigho!"

D. W. (spoken.) "Shall I send for a Buddhist priest for you?"

Girl. (sings.) "I'll not send for *him* either, for I do not want him.
If I invite a Buddhist priest, he will only be jingling and banging;
And I am afraid of jingling and banging. Heigho!"

D. W. (spoken.) "Shall I call in a Lama priest for you?"

Girl. (sings.) "I'll not call *him* either, for I do not want him.
If I send for a Lama, he will only be singing and chaunting;
And I am afraid of singing and chaunting. Heigho!"

D. W. (spoken.) "Shall I call in an exorcist for you?"

Girl. (sings.) "I will not send for *her* either, nor do I want her."
For if I called in an exorcist, she would repeat spells and incantations;
And I am afraid of spells and incantations. Heigho!"

D. W. (spoken.) "You don't want this, and you don't want that; how did you get this sickness of yours?"

Girl. (sings.) "The third month, ah! in the third month,"
At the "pure and bright" period,
When the peach blossoms were opening,
And the willows were bursting forth into green,
I met a young gentleman, who was taking a spring stroll."

D. W. (spoken.) "Spring stroll, or not, what had that to do with you?"

Girl. (sings.) "He loves me, for I am a fair and beautiful girl;"
And *I* love *him* too, for he is young and a student;
And I have spoken a few words of love to him. Heigho."

D. W. (spoken.) "Love, or not love, are you not afraid of your parents knowing it?"

Girl. (sings.) "My father is seventy-eight years of age,
And my mother is deaf,—besides, her eyes are dim;
I am not in the least afraid of either of them. Heigho!"

D. W. (spoken.) "Are you not afraid your elder brother and his wife will know it?"

Girl. (sings.) "My elder brother is seldom at home,
And his wife is constantly at her mother's house;
So I am not at all afraid of those two, either. Heigho!"

D. W. (spoken.) "Are you not afraid of your sisters knowing it?"

Girl. (sings.) "Between my elder sister and myself there is no great difference;
And my younger sister is too young to know anything.
And you and I express the same opinions. Heigho!"

D. W. (spoken.) "And what is it you wish?"

Girl. (sings.) "Oh! my dear Mrs. Wang, I look upon you as my adopted mother," (hastily falls on her knees.)
"On my knees I entreat you to be so in reality, and arrange this affair successfully for me. Heigho!"

D. W. (spoken.) "And if it cannot be completed successfully?"

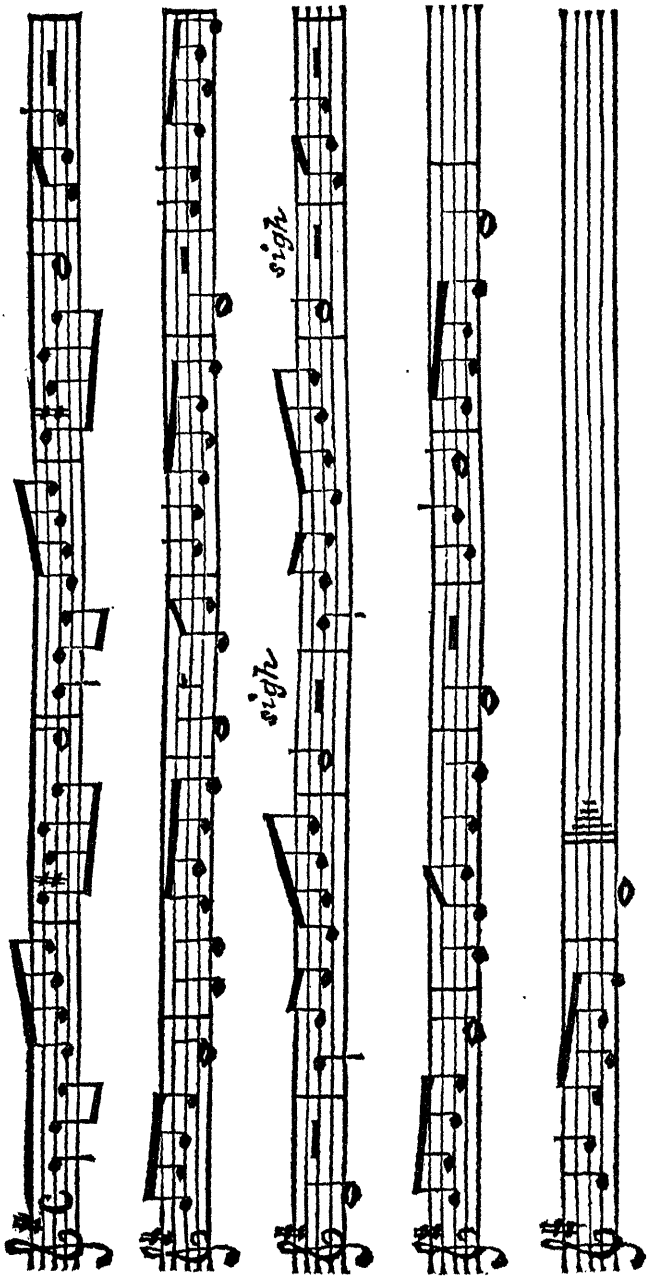
Girl. (sings.) "If it cannot be completed, then I shall die of bitterness. Heigho!"

I fancy some of my hearers saying "what rubbish!" Yes, it is rubbish! And yet there is a great deal to be learnt from this song, puerile as it appears in English, more so than could be learnt from the two "popular songs" I just now quoted: for in this we discover that there is amongst the Chinese as with us, sickly sentimentality, love-sickness in fact; and we learn, moreover, the superstitious remedies suggested. First, the doctor; (I do not include him of course under the head of "superstitious remedies") the young lady knows well that all the doctors in the world, with their pulse-feeling; priests, with their banging of cymbals, &c.; Lamas with their chauntings, and exorcists with their incantations, are useless. She is afraid of all these characters, but, from various causes, she is not in the slightest degree afraid of her own family. Another thing we learn, that there is such a thing as "sweethearting," or love-making amongst them; it may be, indulged in by stealth, a great deal is done in that way in our own countries; but it remains a fact, in spite of father, mother or friends, she meets this young gentleman, and actually tells him

she loves him! And to all appearance too without his even asking her; though for the credit of the fair sex I trust he may have done so, although she omitted mentioning it. At another place she says, "he loves me because I am beautiful, and *I love him*," not because he is handsome, but because "he is young, and a student;" this shows that although young ladies may not study themselves, they like those who do. So here we have mutual love among this ceremonious people, "he loves me and I love him;" and to wind up all, if the girl does not succeed in marrying this young gallant, we have the promise of her dying of bitterness, in other words, dying broken-hearted.

The next illustration I shall give is called "The twelve months many stories."

TWELVE MONTHS.



正月

正月裏是新年　正月裏是新年
丈夫出征去掃邊關
花燈兒無心點　收拾弓和箭
忙忙不得閒　忙忙不得閒
猛聽得街前鼓鑼聲喧
與兒夫辦行囊　那討工夫去看
衣服做幾件　衣服做幾件
袍子褂子多多絮上棉
眼兒中淚汪汪　手內縫針線
離愁萬萬千　離愁萬萬千
平地里風波拆散姻緣
與兒夫今朝　未知何日見

二月

春分二月中　春分二月中
丈夫出征奴好傷情
滿斟上一盃酒　且罷行來送
你爲功名　你爲功名
撇奴在家中獨守孤燈
但願你早成功　旗開就得勝
兒夫你是聽　兒夫你是聽
平安書信多多稍幾封
邊關上朔風寒　要你身保重
說罷就登程　說罷就登程
身上雕鞍心內懶行
走十步九回頭　兩下裏心酸痛

三月

清明三月長　清明三月長
桃紅柳綠美景春光
我男兒不在家　誰把坟去上
奴自承當　奴自承當
祖宗的靈牌供在中堂
必須要燒紙錢　免得先人望
心下好悲傷　心下好悲傷
哭了聲公婆年老爹娘
你孩兒在邊關　保佑他身無恙
回身進綉房　回身進綉房
照了照菱花面貌焦黃
離別了日子不算久　瘦損了姣模樣

四月

立夏四月來　立夏四月來
不寒不暖正好和諧
似此等好時光　兒夫偏在外
寂寞難挨　寂寞難挨
低頭看看紅綉花鞋
我兒夫不在家　誰把你來愛
身子瘦如柴　身子瘦如柴
不茶不飯眉頭兒不開
終日家笑別人　奴家也把相思害
命裏合該　命裏合該
怕的黃昏月照花台
受凄凉和衣寢　懶解香羅帶

五月

五月裏是端陽　五月裏是端陽
曾記得去年共飲雄黃
只喫的醉醺醺　同看榴花放
今日好凄凉　今日好凄凉
艾葉靈符不曾戴一枝
什甚年什甚節　好像修行的樣
獨自守空房　獨自守空房
和衣睡去夢裏成雙
忽然間醒了來　獨臥在紅羅帳
月照紗窓　月照紗窓
人嫌夜短我恨更長
至黃昏睡不着　又見鷄兒唱

六月

六月裏熱難禁　六月裏熱難禁
丈夫出征好不放心
離別了有半年　不見個音合信
佛前把香焚　佛前把香焚
救苦救難的觀世音
保佑他早回程　奴把經來印
問卜求神　問卜求神
卦裏平安應在行人
討了根上上籤　夫妻還有分
心下沉吟　心下沉吟
打卦求籤都認不的眞
算行人說的不準　到底偏倒運

七月

立秋七月天　立秋七月天
牛郎織女又是一年
到今朝渡銀河　兩下裏重相見
今日團圓　今日團圓
明日清晨各歸一邊
却比做我夫妻　恩愛生拆散
世事不周全　世事不周全
神仙尙有離合悲歡
何況我世間人　豈沒有離別嘆
睡也睡不安　睡也睡不安
眼望天河我自語自言
織女星下天來　同受凄凉怨

八月

八月裏是中秋　八月裏是中秋
賞月的人兒正在高樓
似奴家受孤單　常把眉頭皺
雁過南樓　雁過南樓
金風陣陣冷冷颼颼
我男兒在邊關　吹的他征袍透
悶在心頭　悶在心頭
思想兒夫每日憂愁
鈕扣兒漸漸鬆　纔知我身子瘦
寂寞幾時休　寂寞幾時休
男子漢心腸不似女流
莫不是續新人　戀鮮花忘了舊

九月

重陽九月天　重陽九月天
丈夫出征不見回還
正團圓忽離別　這苦誰輕慣
眼兒望將穿　眼兒望將穿
暑去寒來正好團圓
天又短夜又長　不由人胡思念
想思病懨懨　想思病懨懨
海上仙方不似靈丹
若要病兒好　除非重相見
容顏不似先　容顏不似先
花沒了雨露也要枯乾
何況我女嬡娥　不見了男子漢

十月

十月小陽春　十月小陽春
地冷天寒瑞雪紛紛
我兒夫在邊關　冷熱無人問
山高水又深　山高水又深
我爲你憂愁減去精神
你若是忘了我的情　自有天不忿
想起了古人　想起了古人
孟姜女尋夫個個知聞
哭長城送寒衣　千里多勞困
將心比自心　將心比自心
今人的心腸不似古人
我若找我兒夫　又恐怕人談論

十一月

十一月來到了　十一月來到了
滴水成氷雪花飄飄
生一個煖爐兒　也當窩家抱
愁殺了女多嬌　愁殺了女多嬌
誰與我鳳友鸞交
火爐煖熏熏　不似窩家妙
何人把門敲　何人把門敲
稍書的人兒叫聲嫂嫂
雙手兒接過來　是封佳音報
拆開封皮瞄　拆開封皮瞄
上寫著賢妻不必心焦
門戶兒要小心　務必年終到

十二月

十二月在眼前　十二月在眼前
昨夜的燈花結采成蓮
喜鵲兒叫喳喳　想必是重相見
門外鬧聲喧　門外鬧聲喧
丈夫回家下馬離鞍
好一個不失信　眞正男子漢
破鏡又重圓　破鏡又重圓
也不是丈夫回轉家園
分明是斬想思　一把龍泉劍
歡娛不可言　歡娛不可言
銷金帳裏同訴心田
常言道遠歸來　更比新婚燕

THE TWELVE MONTHS MANY STORIES.

"TRANSLATION."

First Month.

'Tis the first month of the new year,
My husband is going to the wars;
He goes to sweep the frontiers.
The illuminations are without amusement to me.
I was preparing his bow and arrows, when I suddenly heard the sound of drums, gongs and uproar in the street.
Arranging my husband's baggage, how could I find time to go and look at it?
I have made several garments, and have well quilted the coats and jackets.
The tears flowed plentifully from my eyes as I was sewing.
At parting innumerable sorrows arise, like the tempest arising out of a calm, suddenly to dissever our union.
Oh, my husband, we are to be separated!
When shall we meet again?

Second Month.

'Tis mid-spring; the "*Chunfên*," *
My husband is going to the wars, and I am very sorrowful.
I pour out a full cup of wine, to speed him on his journey.
You go for honour and fame; *I* am left at home to watch the solitary lamp.
I only wish you to soon acquire honour; for when *your* flag is unfurled, you *must* be victorious.
Listen, husband; send me many letters of your welfare.
The north wind is cold on the frontiers, you must take great care of yourself.
When I had made an end of speaking, he mounted into the saddle, and started on his journey.

* Name of the period. Spring equinox, about 20th March.

Yet in his heart he was loth to go!
At every ten steps, he nine times turned his head.
Both our hearts were full of grief and trouble.

Third Month.

'Tis "Pure Brightness,"* the third month,
The peach blossoms are red, the willows are green,
And the appearance of spring is bright and beautiful.
My husband is from home; *who* will visit his ancestor's graves?
This I *ought* to, and *will* do myself.
The "spirit-tablets" of his ancestors are placed in the middle hall.
Paper-money must be burnt to satisfy their expectations.
In the distress of my heart, I cried to my husband's dead aged parents.
"Your son is at the frontiers; oh, protect, and keep all sickness from him!"
I then returned to my chamber.
On looking in the mirror, how pallid my countenance was.
Althouth not separated so *very* long from my husband, yet I have become quite emaciated.

Fourth Month.

'Tis the beginning of summer;† the fourth month is come!
It is neither cold nor hot; this *would* be pleasant for us, this agreeable weather.
Yet my husband is absent; this solitude is hard to bear.
I bend my head to look at my red embroidered shoes.
"My husband is from home; who is to come and admire you?"
My body is fallen away to a shadow.‡
I cannot take either tea or food, and I am always melancholy.§

* About the 5th April.
† About the 5th May.
‡ *Lit.* like split wood.
§ *Lit.* my eyebrows will not open.

'Twas but the other day that I laughed at *others* suffering from love sickness, now *I* am suffering from it also.
Yet 'tis my destiny, and I ought to bear it.
I fear at night when the moon shines on the flower terrace.
I am *so* lonely, and I sleep with my clothes on, for I am indifferent even to untying my silken girdle.

Fifth Month.

'Tis the fifth month,—the "dragon-boat festival."
I remember last year at this time, how my husband and I drank the "*hsiung 'huang*" wine together.
We drank till exhilarated, and then we went together to look at the opening pomegranate blossoms.
But to-day, how very lonely, how solitary!
I never wear a "spirit charm," nor a sprig of the "*ai*" leaf in my hair now.
This year, this festival, how happy is it!
Yet I am a recluse, and must look after empty rooms.
I sleep with my clothes on.
In my dreams my husband is with me, but I suddenly awaken and find only myself within the red silken curtains, and the moon shining on the gauze windows.
Others are annoyed that the nights are too *short*,
I am vexed that they are so *long*.
I cannot sleep till daybreak; till I hear the crowing of the cocks.

Sixth Month.

'Tis the sixth month, and the heat is difficult to bear.
My husband is gone to the wars, and my mind is very uneasy.
We have been separated now half-a-year, and I have not yet received a letter from him.
I have burnt incense before Buddha, and "Kuan Yin," the goddess of mercy, the saviour of those in distress and difficulty.
"Protect him, so that he may soon be on his homeward road!"

I will have Buddhist books printed.
I ask of divination; I entreat the gods, and have the fortune of the wayfarer told.
I draw one of the slips, 'tis a long one; one of good omen.
Husband and wife will again be united.
Yet at the bottom of my heart I thought, "this divining, this drawing of fortune-telling slips, I cannot believe to be true.
The good omen of the wayfarer will not come to pass.
After all it will turn out unfortunate.
He will not return!"

Seventh Month.

'Tis the beginning of autumn;* the seventh month.
'Tis the month that "*Niulang*"† and "*Chihnü*" meet.
This morning they cross the "Silver river,"‡ and this evening they again are united.
To-morrow morning early they will again separate.
They love one another as well as we, and yet they have to separate.
Worldly affairs cannot always be as we should wish.
Even gods and fairies have their separations and unions, their sorrows and joys!
Why then should not I, a mortal, have my sorrows at separation?
I am restless; I cannot sleep.
My eyes look up to "Heaven's River,"§ and I soliloquize:
"*Chihnü!* Star! Come down from heaven, and share my solitude and distress!"

Eighth Month.

'Tis the eighth month, the middle of autumn.
The gazers at the moon are in the upper stories.
So too am I, but I am lonely and solitary!

* About the 7th August.
† See note 6, Vocabulary.
‡ Milky Way.
§ Milky Way.

I am constantly melancholy.*
The wild geese fly southward, and the "Golden wind"† comes in cold fitful gusts.
My husband is at the frontiers.
This wind blows on *him*, and must penetrate through his clothing.
In the depths of my heart I am *so* sad.
I am daily sorrowful when I think of my husband.
I *know* that I am falling away, the buttons tell me so, for my garments get gradually looser.
When shall I be relieved of this solitude?
A man's heart is not like a womans!
Surely he cannot have taken another!
Become infatuated with a fresh flower, and forgotten the old!

Ninth Month.

'Tis "*Chungyang*," the ninth month.
My husband is gone to the wars and not yet returned.
Only just united, and so suddenly to be separated.
Who would easily grow accustomed to this misery?
I look forward with anxiety for his return.
The hot weather is over, and the cold has arrived.
'Twould be really pleasant to be united now.
The days are short, and the nights *so* long.
I cannot avoid thinking of him.
I am incurably lovesick!
Even the sea fairies' antidote "*ling-tan*," cannot cure it.
If I wish to get the better of my sickness, there is no remedy for it, unless I see him again.
My complexion is not the same as formerly.
If the flower has not rain or dew, that also will wither.
And shall not I, a fair young woman, who does not see her husband, do so too?

Tenth Month.

'Tis the tenth month; "*Hsiao-yang-chun*."
Earth and sky are cold, and the snow falls fast and thickly.

* *Lit.* eyebrows constantly frowning.
† Autumn breeze.

My husband is at the frontiers.
There is no one to enquire if *he* is cold or hot.
The mountains are high and the waters are deep that separate us.
I am sorrowful for your sake, and my spirits are diminishing.
If you forget my love, Heaven will be wroth with you!
I remember one of the ancient women, "Mêng-chêng," went to seek her husband.
Every one has heard of it.
How in tears, fatigue and hardship, she struggled over a thousand *li* to the great wall, to take warm clothing to her husband.
Her heart was like *mine*!
But persons' hearts *now* are not the same as the ancients.
If *I* went to seek *my* husband, I am afraid people would only ridicule me.

Eleventh Month.

The eleventh month has arrived.
The dropping water becomes ice, and the snow flakes whirl about in the air.
I light a hand-stove and embrace it instead of my husband.
This melancholy is grievous for a young woman.
Who could be so affectionate to me as my husband?
The hand-stove is warm, but not so warm or affectionate as *he*.
Who is that knocking at the door?
It is the letter carrier; he calls out "madam!"
And I receive in my two hands a welcome letter.
I break open the seal and look.
In it is written. "Worthy wife, do not be unhappy, take care of your domestic affairs, I shall certainly arrive at the end of the year."

Twelfth Month.

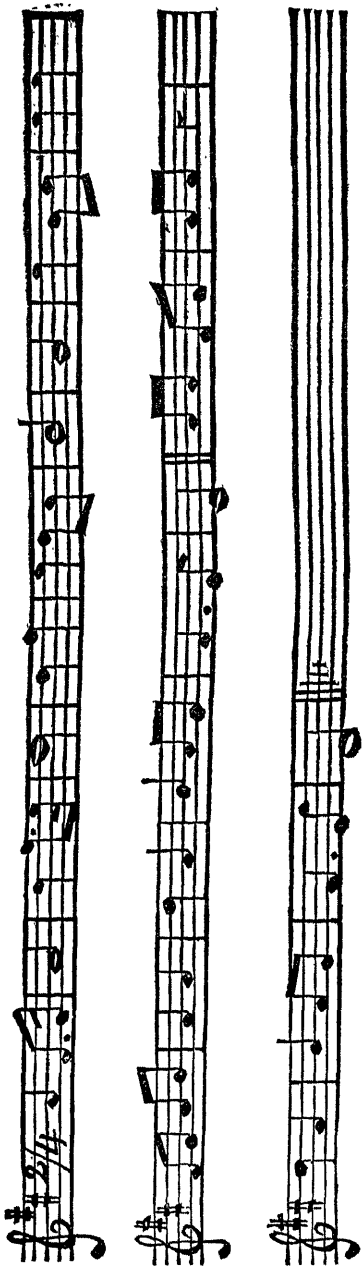
The twelfth month is here.
Last night the lamp-wick formed a beautiful lotus flower.

The magpies chattered; I think I *must* soon see him again.
There is an uproar outside the door.
My husband has returned home!
He quits the saddle! He alights from the horse!
He *is* a good one! He did *not* break his word!
He is a *real*, genuine husband!
The broken mirror is again united.
This is not merely my husband returned to his home from afar.
It is evidently the sharp sword of the "Dragon of the fountain" to cut off my love-sickness.
I am too delighted to speak!
Within the golden embroidered curtains we mutually relate our heart's thoughts.
Well may the common saying be.
"There is more pleasure in one returning from afar, than in a new marriage."

I will refrain from passing any comment on the above lines; I feel it would be superfluous; I think, omitting the few absurd sentences in it, the general tenour of the words, in spite of the rough translation, will speak for themselves.

The next song I shall introduce is called, as I shall translate it, "The Haunts of Pleasure." The air of this song is lively, and I think extremely pretty.

THE HAUNTS OF PLEASURE.



烟花柳巷

烟花呀柳巷　女裙釵呀
臉擦官粉　紫肌花兒開呀
好似仙女來咳咳　噯呀一呼咳呀
扯起攬招牌咳咳

瞞怨那爹娘　心太狠那
貪圖那銀錢　牡丹花兒開呀
將奴賣下水來咳咳　噯呀一呼咳呀
身做下賤才咳咳

十三那十四　學彈唱啊
十五十六　月季花兒開呀
立逼着奴開懷咳咳　噯呀一呼咳呀
挑情又學乖咳咳

十七呀十八　去陪酒呀
化拳行令　美人花兒開呀
引客進房來咳咳　噯呀一呼咳呀
奉承有錢財咳咳

三寸呵金蓮

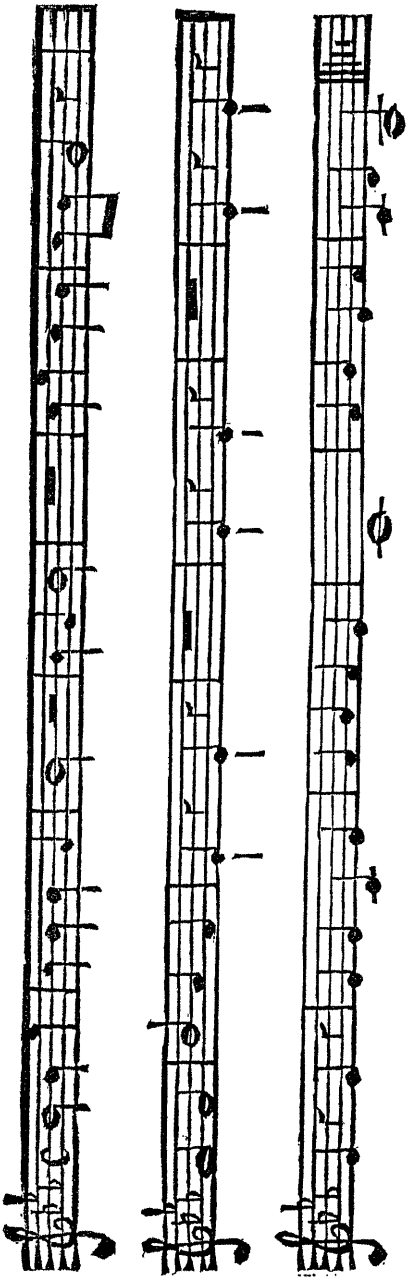
纂牙床上　床前跕呀
但等採花來咳咳　眾仙花兒開呀
八情將你待咳咳　噯呀一呼咳呀
贈來呵的銀錢　鴇兒樂呀
贈不來那銀錢　地丁花兒開呀
皮鞭兒打下來咳咳　噯呀一呼咳呀
小臉落下淚來咳咳　八人都愛呀
年少啊青春　九月菊花開呀
年老的妓女　噯呀一呼咳呀
人人嫌起來咳咳　容顏改呀
另眼瞧下來咳咳　綉球花兒開呀
年過呀三十　噯呀一呼咳呀
八若老了
殘花又重開咳咳
八老落下牌咳咳

奴家呀凉藥　吃的早啊　蒼天哪把奴　從了良啊
吃了凉藥　月季花不開呀　挑個年少　合意的郎啊
兒從何處來咳咳　噯呀一呼咳呀　逃出了烟花巷哼哼　噯呀一呼咳呀
那有小嬰孩咳咳　香烟斷那　上路到天堂哼哼
不能呵生兒　不大見面那
同胞的姊妹　噯呀一呼咳呀
枉在陽世三間咳咳
陽世白走了一番咳咳
惱恨哪老天　心太狠那
桃花二字　落在奴的身那
怎不落在旁人呀呀　噯呀一呼咳呀
前世無修陰呀呀
終朝啊每日　會新郎啊
携手攬腕　進綉房啊
共枕又同床哼哼　噯呀一呼咳呀
同穴合婚帳哼哼

One would not imagine, by the tune that the words of this song related to a very painful subject. There is a pathos and plaintiveness in the language which are very affecting; and most of the ideas are conveyed figuratively. I will not attempt to translate it, for indeed, I feel I could not do justice to it, so I will simply give a general outline of it, leaving others, perhaps, with greater acquirements in the Chinese language than myself, to translate it at some future time. "A girl bemoans her hard fate, and bitterly reproaches her parents for their hard-heartedness and covetousness in selling her when quite a child, to a life of infamy. She, in pathetic language describes her progress step by step in guilt, and the many incidents connected with such a life; flattered and caressed if successful, beaten severely with a whip, if the reverse, till as she touchingly expresses it, 'the tears trickled down my poor little face;' on to old age, with youth and beauty gone, every one looking on her with contempt, no friends or relations to notice her, no son to burn incense for her when she is dead, what has she to hope for? Winding up with a prayer to heaven to protect her, and send some one to take her from that horrible life, enable her to be virtuous, so that she may get on the road to heaven." There is something peculiarly pathetic in this song, and much also to reflect on, for we learn from it that girls are remorselessly sold by their parents to a life of infamy; probably two-thirds of the unfortunate beings we see, being sold in a similar way, very few indeed taking to it by choice. What struck me most when I first heard the song, was the earnest prayer at the end of it. No talk of "*chin-chin-ing* Joss," but a direct prayer to heaven. There is something inexpressibly touching, also, in another part; she almost reproaches heaven for giving her the "peach blossom destiny," when she exclaims, "heaven's heart must have felt resentment against me, or why allow the two characters 'peach blossom' to alight on me? Why not cause them to fall on some other person? Surely, in my former life I could not have cultivated virtue!" To understand this, my hearers must bear in mind, that in Chinese fortune-telling, certain characters are lucky, or unlucky, as the case may be; and the two characters 桃花 "peach blossom," are considered particularly unlucky, for if they fall on a male child, it is believed he well grow up a profligate; if a female, that she will become fallen; so that parents consider it ominous of the future fate of their children, should they be so unfortunate as to have a "peach blossom destiny."

The next song is called "The beautiful Jade Needle." I select it, for I think the air not only pretty, but strikingly curious, and I give it for that only; my hearers can form their own opinion of the words.

THE BEAUTIFUL JADE NEEDLE.



玉美針

青柳兒青清晨早起　丟了玉美針那
情啊　眞那　正正正正正正　噯噯噯噯喲
噯噯噯噯噯噯喲

丟了玉美針
誰家的學生喇　拾去了奴的針那
情啊　眞那　正正正正正正　噯噯噯噯喲
噯噯噯噯噯噯喲

拾去了奴的針
送與了奴家　報答你的恩那
情啊　眞那　正正正正正正　噯噯噯噯喲
噯噯噯噯噯噯喲

報答你的恩
爹媽若是知道啊　打斷了奴的筋那
情啊　眞那　正正正正正正　噯噯噯噯喲
噯噯噯噯噯噯喲

打斷了奴的筋　　打不改奴的心那
打壞了皮肉
情啊　眞那　正正正正正正　噯噯噯噯噯
噯噯噯噯噯噯噯

打不改奴的心　　我也甘心那
就死在黃泉
情啊　眞那　正正正正正正　噯噯噯噯噯
噯噯噯噯噯噯噯

就死也甘心　　直到如今那
十五歲挑情啊
情啊　眞那　正正正正正正　噯噯噯噯噯
噯噯噯噯噯噯噯

挑情到如今　　寫了退婚那
婆婆家知道啊
情啊　眞那　正正正正正正　噯噯噯噯噯
噯噯噯噯噯噯噯

寫了退婚　另嫁別人那
婆婆家不要啊　噯噯噯噯喲
情啊　眞那　正正正正正正　噯噯噯噯喲
噯噯噯噯噯喲
另嫁別人

I give a rough translation of the above with great diffidence, perfectly aware that its literary merits are not of a very high order, and beg to draw the attention of my hearers to "Captain Jenks" and "Shoo, Fly!" while listening to it. It runs thus:—

1

'Twas in the spring when the willows were green,
At the first dawn of the morning,
That I lost a beautiful jade needle.
I did! really I did!
Oh, dear! oh, dear! heigho!

2

I lost a beautiful jade needle.
What young student of the different families
Could have picked up my needle?
(Somebody must have picked it up.)
They must, they must, indeed!
Oh, dear! oh, dear! heigho!

3

Whoever has found my needle,
If you will only return it to me,
I will recompense you for your kindness.
I will, indeed I will!
Oh, dear! oh, dear! heigho!

4

I will recompense you for your kindness,
Though my father and mother if they knew of it,
*Would cut the very flesh from my bones.
They would, indeed they would!
Oh, dear! oh, dear! heigho!

5

They would cut the flesh from my bones,
They might lacerate my flesh,
But they could not change my heart,†
They could not, indeed they could not!
Oh, dear! oh, dear! heigho!

* *Lit.* beat and break my muscles asunder.
† Inclination.

6

They could not change my heart,
For if I were dead, and in my grave,
I should still be willing.
I should, indeed I should,
Oh, dear! oh, dear! heigho!

7

I should still be willing,
I am fifteen years of age,
And till now I have never been in love.
I've not, indeed I've not,
Oh, dear! oh, dear! heigho!

8

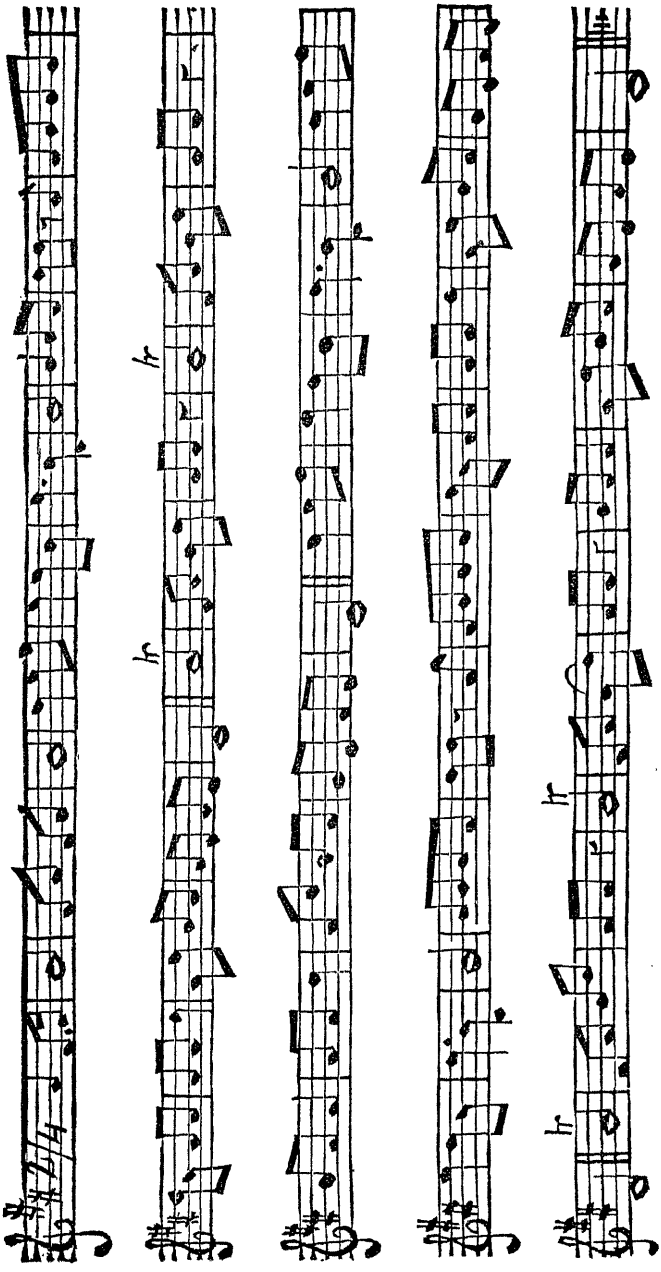
I've never been in love till now,
If my betrothed's family should know of it,
They would write a deed of separation.
They would, indeed they would,
Oh, dear! oh, dear! heigho!

9

They would write a deed of separation,
My betrothed's family would not want me,
And I could marry another person.
I could, indeed I could,
Oh, dear! oh, dear! heigho!

The next, and last, I also select only for the music which is lively and quaint, but I leave my hearers to judge for themselves; it is called "The Dagger."

THE DAGGER.



小刀子

姐在呀房中啊　好不心焦啊
叫了一聲情人　你不必來了啊
我的男人知道了好好
吐一呼一呼一呀　吐一呼一呼一呀　吐一呀
我的男人知道了好好

昨夜呀晚上啊　挨了一頓打呀
清晨早起　磨了一把明晃晃的刀啊
他可找你把殃兒找好好
吐一呼一呼一呀　吐一呼一呼一呀　吐一呀
他可找你把殃兒找好好

你的身子單那　你的力氣薄啊
多麼大的年紀　把命兒喪了啊
你的小命兒實難逃好好
吐一呼一呼一呀　吐一呼一呼一呀　吐一呀
你的小命兒實難逃好好

情人開言道啊　美人你是聽着啊
那黃操殺人　倒有八百來的萬那
我可不怕那殺人的刀好好
吐一呼一呼一呀　吐一呼一呼一呀　吐一呀
我可不怕那殺人的刀好好

人活呀百歲呀　終須一個死啊
那樹兒老了　葉又焦稍啊
我是一命歸陰曹好好
吐一呼一呼一呀　吐一呼一呼一呀　吐一呀
我是做鬼也風騷好好

In my translation of this I have endeavoured to render it in rhyme so that it would suit the tune, (I am afraid not very successfully;) this also my hearers must take for what it is worth. The translation runs thus.

1

Madam was in her own room all alone,
With her heart very anxious and beating with dread,
She called to her lover in a loud warning tone,
"Pray don't come, my husband is *au fait!*" she said.
* Turr-r-r-iko-iko-i-ya!
Turr-r-r-iko-iko-i-ya!
Turr-i-ya!
"My husband is *au fait!*" she said.

2

I had a good beating last night, ('twas too bad)
This morn, it was just about break of day,
He ground up a bright glittering knife that he had;
He seeks but for vengeance, find you where he may.
Turr-r-r &c.
But for vengeance, find you where he may.

3

Your body is fragile, your strength is but slight;
In years but a youth, (How old can you be?)
Thus to lose your dear life. Is there safety in flight?
Ah, no, 'twould be hard from your sad fate to flee!
Turr-r-r &c.
'Twould be hard from your sad fate to flee!

4

The lover exclaimed, "dearest, did you ne'er hear,
How '*Huang-tsao* of old, in the course of his life,
Slew nearly eight millions of men?" I don't fear,
To encounter the flash of the murderer's knife!
Turr-r-r &c.
The flash of the murderer's knife!

* Imitating the sharpening of a knife on a grindstone.

5

Man may live to a hundred, but at last he *must* die.
The tree becomes old, and its foliage fades.
As 'tis so with them, so also must I,
Return back my life to the region of shades.
Turr-r-r &c.
Be a ghost, but the most bewitching of shades."

I think it highly probable that I have tired the patience of most of my hearers by this time, so I will close with a few remarks. First, as to the object of my reading this paper. One of my motives was that of endeavouring to interest those better informed than myself, in the music and ballads of the Chinese; also, to show, if possible, that out of Chinese "popular songs" a great deal of information was to be gained, as well as some good music. That no matter how silly or trivial the subject might be, to the person desirous of learning Chinese, much knowledge combined with amusement might be attained. Most of my hearers have probably read the "Rag-pickers of Paris." Figuratively we want "rag-pickers," to grope in the gutters of Chinese light literature, for among the refuse and rags how many valuables may be found! And of even the rags themselves the best "cream laid" paper can be made. Let me hope that my small collection of rags may at least have whiled away half-an-hour in the sorting, and perhaps eventually be manufactured into, I will not say "cream laid," but some commoner kind of paper. And that others may be tempted to follow in this "rag-picking," and, by superior skill in their profession, find valuables where I have only been able to gather rags.

ARTICLE V.

THE MYTHICAL ORIGIN OF THE CHOW OR DJOW DYNASTY, AS SET FORTH IN THE SHOO-KING.*

By THOS. W. KINGSMILL.



TO the student of Chinese history the names of Yaou, Shun and Yü ever loom like gigantic spectres on the confines of another world. They have so much humanity about them that we feel loth to depose them from the realm of fact, and give them their station merely amongst the myths of ancient mankind. So distinct do they appear that we almost feel as if we could grasp them in person and assign them their place in Chinese history, and it is only when we seek to define more strictly their operations and place in the current of time, that we find them continually eluding our search. They stand ever before us like the grim giant of the Brocken; and like it we cannot be surprised, that it is only before the strong light of modern philosophic research, that we find them at last dissipated into vast shadows cast by ourselves on the distant clouds of antiquity.

Still however there is much to be learnt from them. They point out to us the first beginnings of Chinese civilisation, and, intensely Aryan as they are in their vigour and vitality, they lead us to the inevitable conclusion that to that race China, as well as Europe and the greater part of Asia, owes her first step in the onward path of civilisation.

If however Yaou, Shun and Yü are in person to be relegated to the world of myth, the works they are fabled to have undertaken still exist to testify that there were intellectual giants in those elder days. They point out that the path of Aryan progress and increasing civilisation spread from that home of the race

* Read before the Society on 7th February, 1872.

in Central Asia whose position and history is still a thing of mystery. The later progress of the conquering race in China falls within the limits of history; the occupation of the two Kwangs and the coast provinces are events of which we have written accounts, clouded indeed with fable but clear and distinct in their main issues.

Dim tradition points out to us the entrance of the Aryans into the Flowery Land from the extreme N. W. of the empire, and both it and the remains of their handiwork show their gradual advance along the Yellow River, till at last, the banks of that river being occupied, we trace them up to, and at last crossing the great Yangtsze (the Kiang *par excellence*).

Had the Chinese been a nation of poets the remembrance of their great ancestors would have found vent in an epic prouder than that of the Greeks themselves, as the Chinese poem would have had for its burden the contest of man with the powers of nature, rather than the struggles of nations anxious for pre-eminence. The Chinese are not a nation of poets, and to myth and fiction they have even been prone to apply the rule and square; they are euhemerists in the truest sense of the word, in their search after prosaic possibility. They long ago arrived at that stage of criticism which led them to view fable as the mere memory of fact, and to endeavour by leaving out the apparently improbable portion of their myths to restore the lost current of history. It is thus that Chinese chronology is made to ascend to long ages before there is any evidence that the Aryan race itself had existence, and compared with which its residence in China is but a thing of yesterday.

This euhemerism has produced in Chinese story an ante-mythic period filled with dreary tales of the reigns of Hwangti, of Shennung and others, from which it is a relief to pass on to the myths of the Hia and Shang, with their quaint tales of the emperors Yaou, Shun and Yü. Even here we notice the same squaring down of tradition and myth. The stories of the Hia, the Shang and the Yin dynasties have been reduced by rule and compass, till in Chinese history they look like the annals of events which occurred yesterday; and it is only when we arrive at the dawn of real history and notice the uncertainty hanging over many of its recorded events, that we can form a just idea of the amount of squaring and invention necessary to have produced the logically perfect records of the early part of the Djow, the Shang, and the Hia dynasties.

The burning of the books in the time of the Tsin, (even if that event be not itself a fable) has aided this process by destroying, in a great measure, all records which would have thrown discredit on the traditions of the earlier dynasties, so that the lists of sovereigns and ministers bear no small resemblance to the pedigrees of ancient families with ourselves; the very completeness of which, sometimes up to the time of the Flood or antecedently thereto, carries their most conclusive disproof.

Looking back then through the so called history of China we find records of sovereigns ruling over the Tienhia ages before that expression had any significance to the Chinese themselves. Yü and his successors, who, if they had any personal existence, were merely the chiefs of a small settlement laboriously extending their fields, won from the plain of the Hwangho, by embankments carried down by degrees from higher to lower levels, are made to appear rulers of a great empire; and it is not till late on in time of the Djow that we really find any tangible limits to the boundaries of the actual empire. The province of Chehkiang claims the resting place of the great chief, a fitting burial place certainly were we to place implicit credence in the legends of the great engineer and statesman. The object is however not to elucidate the myth of the great flood and the labours of the three sovereigns but to draw attention to a still later development of fable.

In a few words history may be said to begin to dawn with the later monarchs of a stock calling themselves the Djow, and alleging their descent from a certain King Wan otherwise the Classic King who ruled over the state of Djow, at that time bearing allegiance to the empire of the Shang under the corrupt Show or Chow the last of the line.

A critical examination of the legend of the rise to power of the Djow will throw some light on the origin of the story which seems to have sprung from one of the solar myths of the ancient Aryan race.

First however it is necessary to point out how much the usually received method of romanising Chinese words has tended to obscure their connection with the root words of the Aryan family, and hitherto in great measure to obstruct their intelligent comparison. Two points in which the Chinese and the other Indo-Chinese languages differ from those of the great Indo-Germanic family have been especially potential in throwing a cloud of uncertainty round this connection, namely the system of tones and the so-

called aspirated consonants. The former seem to have derived the origin from the initial or final letters and at first to have been constant in their application; gradually the elision of finals or initials rendered them merely the echoes of departed sound, and introduced an element of uncertainty in their application which has since had a perpetual tendency to increase, till at the present day their original application is almost entirely clouded under a host of irregularities and exceptions. The so called aspirates are the vicious rendering of the ordinary Aryan surds and sonants, and possibly owe their origin to tradition from pre-existing dialects. They are produced by checks in pronouncing the consonants more sharp and distinct than those of the more polished Aryan tongues. Phonologically compared these checks are found to correspond with the more simple Aryan system; the so-called aspirates and non-aspirates being respectively the surds and sonants of the other.

Other changes may be noticed, but as these generally fall under the rules of what is known as Grimm's law there is the less need in this paper to follow them out in detail. Suffice it therefore to say that the distinction between surd and sonant (or aspirate and non-aspirate) is as constant and unchangeable in Chinese as in the Indo-Germanic group, and that it is as difficult for one to be derived from the other as for a Sanskrit *t* to change into *d*.

Applying this rule to the two languages we find a considerable number of the fundamental roots in the two representative of one another, and by the light thus afforded may make our first attempt to compare the myths of the two nations.

Most ancient in Aryan thought is probably the connection of the bright sky with the Deity, and though the same idea was pre-eminent in the Chinese mind it was impossible to trace any philological connection with the Sanskrit Dyaus and the Chinese Tien. The rule we have enunciated forbids us to derive one from the other, we can however analyse the Sanskrit word and then will be in the better position to trace its Chinese analogue, if such exist. We learn then that the original form of Dyaus was Dyu, associated in Sanskrit, as still in the Indian languages, with the bright clear sky (literally it is said from the idea of springing forth as French *eclater*, to break forth, eventually came to mean to shine). We find the same word and the same idea as sky or day in the Greek Zeus the Latin Ju-piter (Father Dyu) not to speak of the Teutonic Tuisco, and our own Tuesday. In Chinese we have the bright

day as distinguished from the night represented by the analogue of the same word djow 晝 a form which survives in the colloquial to the present day. Nor is this all; in its sense of all extending or arching we find the same word djow in the character 周,* a character chosen to represent the first historic dynasty. Now it is sufficiently remarkable that this word Djow the correlative of the more modern form Tienhia (under the bright sky) should be the name handed down to us as that of the original seat of the Chinese empire. Its king Wan-Wang (the Classic King) by name Chang, the brightness of morning, has by his wife Tai-sze nine sons, the eldest Bek-yi-kuan of whom nothing of importance is heard, the second Wu-wang (the military King) the founder of the empire, but whose name was Fah 發 (literally the sender forth of *light*) the third Sien 鮮 (clear or fresh) the fourth Dan 旦† (the dawn). Of the sons Fah and Dan occupy the most conspicuous place, supported indeed by a relation Shih 肆 (the carnation coloured).

Their father, ruler of Djow, in dying calls the attention of his sons Fah and Dan to the iniquities of Show 受 (the Receiver) or Chow 紂 (both apparently forms of the one word and connected with 臭 chow to stink, the Greek στυγεω, στυξ,) the last of the dynasty of Shang, or as its latter portion is generally called Yin. Curiously 商 Shang, the usual meaning of which is to devise, is also the term applied to that portion of the night immediately before sunrise, while Yin 殷 though ordinarily meaning flourishing or affluent, seems related with 陰 Yin (obscure, opaque) the correlative of Yang 陽 (clear, splendid) in the Chinese scheme of cosmogony. Too much stress may however be laid on mere verbal coincidences in our present state of ignorance of Chinese philological changes.

The line of Shang is however coming to an end and divers portents announce it. Show neglects the five virtues and gives himself up to idleness and irreverence; he cuts himself off from heaven and introduces disunion amongst the people. He cut through the leg bones of those who were wading in the morning, and tore out the heart of the worthy man; he poisoned and caused to sicken the dwellers within the four seas, and gave his confidence to the villanous and bad; he neglected the sacrifices and incurred the displeasure of heaven. More special crimes are that he murders Bak-kan 北干 (the Northern Shield) apparently connected with the Shih Kan 十干 or ten celestial stems, he imprisons 箕 Gedsze

* 周天 djow tien likewise occurs as the zodiac.

† Dan is apparently connected with the Vedic Ahana the Dawn.

(the Sieve constellation) one of the 28 mansions corresponding with part of Capricornus; while Weidsze Ke, the Morning star (微子啟 Ke the little one) withdraws from the court, and flies away in woeful plight with the sacrificial vessel of Shang to meet the coming prince. The affix dsze here usually translated as a title of honour may be compared with the similar appellation of Kung and Wang in the incoming dynasty, and has been possibly added by the euhemerists to square the story.

The end of the Shang rapidly approaches and is announced by an omen, simple enough according to our explanation, but which has hopelessly puzzled the Chinese commentators. On the day of the sacrifice to the Imperial Ancestor a pheasant crows; the herald of the advent of the Djow or daylight. Meanwhile King Wang (the Classic King) before spoken of but whose name was Chang 昌 (the Effulgent, literally the light of the rising sun) was imprisoned by the tyrant Show for protesting against his evil courses. He finally obtains his freedom, but with his freedom he feels that heaven has appointed him to put an end to the corruption of the empire. According to one tradition he himself, according to another his sons Fah (the Putter forth) and Dan (the Morning), assemble their forces in the West, Chang having been appointed by the tyrant Sai-bak or ruler of the West. From the West then he advances eastwards to the great battle and occupies 黎 Li (the land of the Agriculturists or the *Aryans*). It was still farther east however in the land of the herdsmen 牧野 Mukye, that the great contest took place, and engaged in it are the two brothers Dan and Fah, the ever recurring twins of Aryan myth, the Asvins of the Veda and the Dioscuri of classic mythology.

The forces of Djow, the day, were victorious; they crossed the ford of Mang 孟 (the Beginning), at early dawn. Show led forth his hosts like the forest, and assembled them on the plains of the shepherds; they could offer no opposition, but those in front turned their spears on the hindmost, and the red blood flowed higher and higher till it floated about the 杵* Choo or beaters. So once arms were donned, and the empire was greatly settled. Shang was put an end to and the old course restored; Ge (the Sieve) is let out of confinement and a grave mound erected over the dead Bak-kan (the Northern Shield).

* For 杵 Choo, the beater, we should possibly read 樞 Choo the pole star, the Vedic Akshas.

The new sovereign bowed as he passed the gate of Shang Yung 商容, scattered around the treasures in the Deer tower and distributed 發 (fah) the grain of Gü kiau 鉅橋 thus conferring great gifts throughout the empire. He came from Shang to Fung, stilled the war and attended to the work of peace. He sent his horses to the south of mount Hwa and drove out his cattle to the wilds of the peach woods, showing the empire he had no further use for them as he had soothed the summer regions 撫方夏.

Such is the simple legend of the foundation of the Djow dynasty which I have put down as I found it in Dr. Legge's Shoo King. The proper names I have translated in every case as they are to be found in any good dictionary, many of them remaining to the present day the common appellations of the heavenly bodies.

Solar myths and the contest of the dawn with the powers of darkness undoubtedly underlie much of the mythology or folk-lore of the Aryan races. Eacus King of Egina was himself the son of Zeus, the bright heaven; Zeus the strong rising sun carries off Europa the wide shining dawn, and becomes the parent of Minos King of Crete. Hercules interferes himself in the government of Lacedemon and his descendants, dual, like those of Djow, occupy the throne at a subsequent date.

But if solar myths are thus frequent amongst Aryan tribes, the labours of the mythologists in endeavouring to reduce all ancient legend to the strife of the dawn with the dark night have brought a certain amount of discredit on the fact. It is easy to make a solar story out of many transactions in authentic history. The tale of Cæsar and Pompey has more than once been adduced; and the nursery rhyme of the King and the four-and-twenty blackbirds furnishes a still more complete instance. It is thus necessary to add that it was no preconceived idea of finding a solar myth that led me to search the Shoo King for the records of Djow.

Were the Chinese really to be descended from one of the Aryan tribes whose civilisation has altered the very face of the earth, some trace of the stories of Zeus and the other early Gods and heroes of the race was probably to be found. Yet Chinese cosmogony as interpreted by Chinese historians and Chinese commentators showed no trace of this phase of Aryan culture. Tien and Shang-di and Di (the earth mother) belonged to the later phase represented in the Vedas, when Indra and the Devas had usurped the place of the more ancient deity.

If the identification, which there is no reason to doubt, of Dyu and Djow, the Sanscrit and Chinese forms of the same word the bright daylight sky, be correct, then the story of the Djow dynasty literally read is one of the most perfect of these legends. But we have as yet scarcely arrived at its conclusion. Daylight and Dawn are in many of the myths of the more westerly nations represented as twin brothers with equal powers and attributes, but Chinese ethics would not permit such an interference with the system of subjection of youngers to elders to appear. Fah is therefore the elder brother, and Dan, the dawning, the younger. Dan is the adviser, the prime minister, the general, the *factotum* of the rising empire; his are the horses and chariots and more especially to him is attributed that stumbling block of Chinese tradition the south pointing chariot. Seen as the reflection of a solar myth its meaning becomes apparent and we need for its explanation no more tales of the invention of the mariner's compass. The rising sun gradually climbs the heavens, and as it rises higher and higher its course is more and more directed to the south. Dan however, great as he is, never presumes to occupy his brother's position though evil tongues more than hint at his infidelity. His elder brother becomes ill, the clouds overshadow him and the younger offers himself as a sacrifice in his stead to his great ancestors; his prayer is written on tablets and enclosed in the metal bound coffer. Heaven does not require the sacrifice; the clouds move off and Fah's life is spared. Fah however finally dies. Cheng (the completer) succeeds him and jealous eyes are turned on Dan. He resided in the east for two years longer, till the criminals were taken; he presented the poem of the "Owl" to the King, but this being only partially successful the metal coffer is opened, a great storm of thunder and lightning having convinced the King that something was wrong. In the coffer is found the prayer, and his purity of mind is put beyond question; Heaven sends down rain, the crops beaten down by a furious wind spring up again, the overturned trees are replanted and prosperity marks the year.

There is yet however another aspect in which the story of the Djow has to be reviewed; myth merges in tradition, and while Fah and Dan are none the less solar heroes we are not to be surprised at finding referred to them the dim memories of the past. As hinted above we find Wu Wang in occupation of the Li country, now Li 黎 representing the Chinese people in the

phrase Li-min, and Li 黎 to plough may justly be taken as one and the same word, differentiated merely by the substitution of 牛 *go* or *niu* an ox in the lower part of the latter. We do no violence to philological principles by recognising in the word the old root *ar* of the Aryan tongues. In the occupation then of Li by the Djow we mark the onward progress of Aryan invasion. It does not however stop here, but overflows eastwards into the country of the herdsmen the 牧野 Muk-ye, the wilderness where Turanian tribes drove about their flocks in search of pasture, like the Nomads of Mongolia of the present, and of Manchouria of the last century.

Before its advance the wild tribes disappear, they make a stand indeed and offer battle, but the Mang 孟 the *Rubicon* has been crossed and the superior arts of the invaders tell sorely and surely. It needs no long struggle to decide the mastery; the ruder tribes turn their arms against one another and melt away, as in our own days we have seen the American Indian melt away before the progress of an advancing race.

Myth and tradition here as everywhere else go hand in hand and between the two occurs the debateable land which may belong to either. The old Aryan myth of the struggle of light against darkness, not inaptly fits in with the tradition of the conquest of barbarism by civilisation; and the tales of the sky, of the rising dawn, and the expiring night, afford the basis for the personification of decaying tradition. To quote Max Müller (*Chips from a German Workshop*, vol. II page 172). "Here then we see that mythology does not always create its own heroes, but that it lays hold of real history and coils itself so closely, that it is difficult, nay, almost impossible, to separate the ivy from the oak, the lichen from the granite to which it clings. And here is a lesson which comparative mythologists ought not to neglect. They are naturally bent on explaining everything that can be explained; but they should bear in mind that there may be elements in every mythological riddle which resist etymological analysis, for the simple reason that their origin was not etymological but historical." If there seem to be, as I believe there is, a sharper line of demarcation between Chinese myth and Chinese tradition, than between the myths and legends of other branches of the family, it is to be attributed to the early epoch at which the language became moulded into its present symbolic form. Chang, Fah and Dan would ages ago have suffered as much dialectic degradation as their analogues

in classic history, were it not that in the Shooking we have their symbolic representations as well as their phonetic equivalents. Wu Wang the Martial King and Chow Gung lead us to the confines of tradition, into the realms of which we are taken in the contest between the cultivators and the herdsmen.

Such is the myth of the foundation of the Chinese empire. I have given it in its plain simplicity, laying on one side the many subsidiary stories pointing in the same direction, by which it is surrounded. If I have made it interesting I hope the subject will not be neglected by those with more time and better opportunity, and that a more intelligent system of criticism than blindly following the Chinese commentators will be introduced.

If the origin of the Djow be a myth, that of antecedent dynasties must revert to mere tale. We can readily understand how more horary characters stand for monarchs, and how Chinese astronomy bungled in its calculations of eclipses long past. We may search the national records for traces of traditions of still earlier ages, but we must give up for more intelligible deductions, the long lines of monarchs and dynasties into which the prosaic tendency of Chinese historians and commentators has attempted to turn the cosmogony of a race, from which our own civilisation as theirs derives its origin.

ARTICLE VI.

THE OBLIGATIONS OF CHINA TO EUROPE IN THE MATTER OF PHYSICAL SCIENCE ACKNOWLEDGED BY EMINENT CHINESE;

BEING EXTRACTS FROM THE PREFACE TO TSANG KWO-FAN'S EDITION OF EUCLID WITH BRIEF INTRODUCTORY OBSERVATIONS.*

By Rev. G. E. MOULE.

TSANG KWO-FAN is but recently dead. It is but a few months since he was looked upon both by Chinese and Europeans as the most eminent personage in the Empire out of Peking. His countrymen had a high opinion of his ability and good fortune, particularly after the fall of Nankin, and were not without respect for his character as on the whole an officer of public spirit. By ourselves he was regarded alternately as implacably hostile on principle to the presence of foreigners in China, and as dangerous to the throne itself and only biding his time to re-establish a native dynasty in his own person.

It is not without interest to view him in another character, one in which he has bequeathed some results to his country; namely that of a scientific student, and one who understood in some measure the importance of physical science in the practical concerns of political and private life.

Immediately after his own preface to his edition of Euclid he has reprinted the joint essay of Ricci and his illustrious pupil Seu; and then that of Wylie and his able assistant Le; a care for which the history of the relations of Europe and China will always be indebted to him. But in his own brief account of the occasion of his publication he has said enough of his love for western mathematics, and of his sense of obligations, on his own part and that of his countrymen, to scientific foreigners like Ricci in the past and Wylie in this age, to kindle our interest in that earlier

* Read before the Society on 12th June, 1872.

missionary; in the position he vindicated at the Ming court, by his knowledge and address, for himself and his distinguished companions; and in that eminent and earnest Chinese scholar who stood beside him and his brethren in all the labours and sufferings of many eventful years.

In the midst of the polite conventionalities of a preface, the mutual appreciation of the great Jesuit and his eager and enlightened pupil Seu, recorded—one feels, with but little affectation—by their own pens, is full of deep interest morally and biographically.

Other points of interest are, (1) the Jesuit's intelligent assertion of the value, absolutely and in their applications, of the exact sciences,—his share nevertheless in the lingering belief in astrology,—the importance attached by him to an unceasing effort after improvement in weapons of war, antedating the present eager competition in the perfecting of 'arms of precision,'—his personal relation to Christopher Clavius the early modern commentator on Euclid, eminent also for his labours in connection with the reformed calendar,—and finally his narrative of the circumstances under which, as an imperial guest, he projected, and after long delay with the help of Paul Seu achieved, the translation of the First Six Books.

There is something touchingly noble in his description of the impatience of the Christian Han-lin to make public his new made translation as first steps towards an acquaintance with western lore which might perhaps lead his fellow students to the reception of Christian Doctrine in the sequel; and also of his willingness that the honours of continuing the scientific labour should fall to others if it was so to be. Such a spirit, though in a Jesuit and a man of Keangsoo, would perhaps not have grudged these honours even to a Protestant Missionary and his assistant Le Jin-shuh of Haining (2).

(1) A century later a beautiful edition of the Principia was brought out by the Jesuits (in Europe)—with the unhappy Colophon that, *however irrefragable Newton's conclusions, they were to be received only so far as they were in harmony with Holy Church.*

(2) I am indebted to Mr. A. Wylie who was so good as to read portions of this paper in my absence, at the Asiatic Society's meeting at Shanghai, not only for valuable information which I have embodied in the notes, but for corrections and elucidations of my rendering of mathematical terms in the text, and for one or two more important corrections.

Translation.

ELEMENTS OF GEOMETRY, IN FIFTEEN BOOKS, A CORRECTED EDITION
PRINTED IN THE YAMEN OF TSANG KWO-FAN
AT KIN-LING (NANKIN)
IN THE SUMMER OF THE IV YEAR OF T'UNG-CHE.

PREFACE.

The first six books of the Elements of Geometry were obtained by Seu Wen-ting from the European Le Ma-tow (Mateo Ricci). At the same time Le Leang-an compiled the (1) Introduction to Astronomy and in the tract on the ratios of regular polygons and polyhedrons contained in circles and spheres respectively, and that on methods of trigonometrical observation, the references to the elements necessarily went beyond the first six books. This occasioned disappointment to students because they could not get access to the complete work.

At last during the reign Heen-fung Li Jin-shuh of (2) Hai-ning in conjunction with the western scholar Wei-lee Ya-leih (Alexander Wylie) continued the translation through the latter nine Books, and revised and corrected the whole. The work was now complete; but it had scarcely been engraved and published by Han Luh-kh'ing of Sung-keang when the blocks were destroyed by the (3) Banditti.

Jin-shuh accompanying me to my camp at (4) Gan-kh'ing showed me the work; and represented that it was one which mathematicians could not dispense with, and if the present opportunity of editing it (*lit.* engraving) were let slip it would again in course of time be lost.

(1) Mr. Wylie informs me that this work consists of nineteen tracts published by the Jesuits, of which seven are religious, the others scientific. One of these latter is the first edition of the Elements of Geometry. Two others are the 圜容較義 and the 測量法義, names which I have explained rather than translated *according to information kindly furnished by Mr. Wylie.* (See Mr. Wylie's Notes on Chinese Literature, pp. 217 and 88).

(2) Near Hangchow in Chekeang. The reign Heen-fung extended from 1850 to 1862.

(3) Taipings.

(4) Capital of Ganhwey or Anhwey.

My official post being now changed to Nankin I directed Jin-shuh to make a new revision of the latter nine books and get them printed.

It then occurred to me that without the first six, beginners (in mathematics) would lack the principles of their science. But since the Rebellion, through the dispersion and destruction of books of all kinds, the "Introduction to Astronomy" is hardly to be met with. And the recent editions published in Kwangtung at the (1) Hai-shan-seen-kwan are so full of errors as to be little worthy of notice. I therefore directed that the first six books likewise should be revised and printed.

Our Chinese Mathematical (2) Work arranged under nine heads founds its terminology throughout on concrete subject matters; treating each by separate method. The student sticking blindly to the track (marked out for him) pursues his search; and after a lifetime spent in practical mathematics knows his rules indeed, but knows nothing of the reason for them. So that mathematics are thought by some an impossible study owing to the wearisome multiplicity (of the rules); (but) simply because they look vaguely at the methods and have not the sense to enquire after principles.

We read in the commentary; (on the "Spring and Autumn" of Confucius, § 13, Hi-kung 15th year) "upon the production of things follows *form*, after *form* comes *multitude*, after *multitude*, *number*." Hence number is a result of form. We consider form, penetrate to its principle, and then devise a method for determining its number. Thus though we have not yet seen the methods perfected by our predecessors we invent methods for ourselves which agree (with those) like tallies; and so we go on to calculate the remote and search into the abstruse, enlarging the ancient methods where they are inadequate and advancing continually *ad infinitum*.

Our *Elements of Geometry* discuss not methods but principles, embracing all that possesses *form*; classed under the heads of

(1) The establishment of the well-known Hong merchant Pun Tin-qua at Canton. He published a collection of works some years since including Euclid and other scientific books with the title 海山仙館叢書 *The Hae-shan-seen-kuan collection.* (I owe this information to Mr. Wylie).

(2) Mr. Wylie tells me that this work, the 九章 is almost the earliest mathematical work known in China; and is so named because nine different branches of mathematics are treated in so many chapters. (Note on Chinese Literature, p. 91).

point, line, surface and *solid.* That which is traced out by a *point* is a *line.* The meeting of lines gives *surface.* The (1) accumulation of surfaces is *solid.*

Between line and line, surface and surface, solid and solid, there exist, *as to form*, mutual accretion or similarity, and *as to numbers*, their sum and difference, commensurable and incommensurable numbers, rational numbers and surds.

A thorough knowledge of *points, lines, surfaces* and *solids* applied to the four rules of Arithmetic, is like building your chariot within doors, and bringing it forth to put it on wheels.

Why investigate with servility each concrete object by itself!

Are we then to conclude that the Nine Chapters may be dispensed with? Assuredly not. Let the student thoroughly master his tones and (rhyming) vocables, his *scholia* and commentaries, and he may then read and taste the deep streams of ancient literature. In like manner a clear understanding of the properties of points, lines, surfaces, and solids will enable the student to solve the manifold problems of number.

The rules of Arithmetic are adapted, each to its special purpose. But the Elements of Geometry lay open the original reasons for the arithmetical rules, and present us with results which the rules fail to reach. Develop your knowledge in the one and you will find its use in the other; just as diligence in the studies of childhood finds its reward in (the access it procures to) the universe of books.

(Signed) TSENG KWO-FAN.

(2) IVth year of T'ung-che, Xth month.

ORIGINAL PREFACE (VIZ: OF SEU WEN-TING).

In the days of (3) Th'ang and Yu the regulation of the Calendar by He and Ho, and the duties of the (4) Five Ministers, Sze-kung,

(1) "Here," Mr. Wylie remarks, "the author evidently jumps from the abstract mathematical conception to the concrete; *his aim being to show the relation between form and number in the process of involution.* Hence we are to understand by *point* not a mathematical point but a unit or monad and then all will come straight."

(2) 1865, November-December.

(3) Vide Shoo-king, pp. 18 & 599. Ed. Legge.

(4) *The Five Ministers* were respectively of Wastes, Husbandry, Works, Forests, and Music.

How-tseih, Kung, Yu, and Teen-yoh, all depended upon mensuration and arithmetic.

The (1) six arts of the "Ministers of Chow" included arithmetic amongst them; and the other five could not be applied without mensuration and arithmetic.

Are we to think that (2) Seang and Kh'wang in the invention of Music, or Pan and Mih in that of Implements possessed some extraordinary and marvellous sleight of hand? No, it was merely their refinement in the application of method.

Hence it is said that before the (3) three dynasties they possessed a consummate science of original principles perfected by tradition of masters and the practice of pupils.

But this perished at last in the fires of (4) Tsoo-lung.

From the Han dynasty downwards every one made guesses for himself; like a blind man shooting at a target aiming at random and never hitting. Some relied on their notions of form, like one who would illuminate an elephant with a fire-fly; getting a view of its head but losing sight of its tail.

At the present day even this (pretence at) science is lost, as it could hardly but be lost.

The Elements of Geometry are the foundation of mathematics, whereby the nature of the square and circle, the horizontal and the vertical, can be ascertained; and the uses of the compass and square, the level and the plumb-line, perfectly explained.

Master Ricci from his early years, in the intervals of his studies in moral science, gave his mind to the polite arts. This is a pursuit which belongs to the category of those which (5) are *advanced by the traditions of masters and the experiments of students.* Now (Ricci) had for his master a mathematician of the highest fame named (6) Ting. Hence he is absolutely perfect in his

(1) "Ministers of Chow" 周官 The *Six Arts*—Ritual, Music, Archery, Pushing the Chariot, Writing and Arithmetic.

(2) Vide Lun-yu, p. 202. Mencius, p. 161, for Seang and Kh'wang. *Pan* name of Kung-shoo. Mencius 161 *Qu.* whether *Mih* is the heretical philosopher of whom Mencius says so much.

(3) Hia, Shang, Chow.

(4) Tsin Sze Hwang-ti B. C. 243, (vide Szc-kee 36th year of Sze Hwang, B. C. 215).

(5) See above p. 6.

(6) Christopher Clavius, (vid. Ency. Brit. art Euclid). 丁 usually written 釘 a nail, adopted, somewhat fancifully, to represent the latin name *Clavius*, (*quasi* Clavus a nail). Some of the Roman Catholic Missionaries of the present day appear to be guided by the sense rather than sound of their names in turning them into Chinese. E. G. 田=de la Place.

demonstrations. Having long been intimate with me, and, in our occasional conversations, having frequently touched upon this topic, I begged him to turn into Chinese the various works on form and number. I conceived however that until this book (the elements) were translated, we could not discuss the others. And accordingly I assisted him in making a version of the six most important books. When it was finished we went through it again, advancing thus from what was obvious to what was abstruse, and from a state of hesitation to one of certainty.

Meantime I found applications for what had seemed useless, and (gathered that the whole) was the foundation of all the useful arts.

Well may our work be called the (1) Figure-garden of all Form, the Science-ocean of all the Schools.

Although our work is by no means complete, yet compared with other books this is in a reasonably good condition.

I cannot but reflect with amazement that, so unexpectedly, when the Science of the Ancients had been utterly lost already some two thousand years, we should thus have suddenly obtained a means of supplying the lack of the canon and traditions of Th'ang, Yu, and the three dynasties. The advantage to this age is most assuredly great.

With two or three friends of common tastes I have therefore printed and published this Treatise.

The master says; this book is of such service to all the schools as almost to be equivalent to the living presence of He and Ho, Pan and Mih. Small in extent, its great use lies in this that it will give accuracy and precision to the natural genius of students.

My own opinion is that its usefulness will be greater or less according as persons use it.

Like the great wood-cutter Tun Lin, whose proper genius guided him in choosing (trees for) posts or beams, joists or rafters.

However, our master's learning is three fold; its highest division is Morals and Religion, its lowest Natural History and Physics. Of Physics one distinct branch deals with form and number, each point being precise, real, and of the nature of an axiom; ascertained beyond the chance of doubt, and capable by analysis and demonstration of being assured to others.

(1) 萬象之形圃
百家之學海

I have been eager to publish this, a part of the lowest class of the sciences; because I was anxious *first* to bring forward what is easy of belief; so that persons who have read our text and comprehended its meaning, may perceive that our master's erudition is trustworthy and beyond suspicion.

As for what was said above that all the mathematical sciences depend on this (Euclid) for their principles—that could hardly be set forth even summarily in this preface of mine.

Written by (1) Seu Kwang-ch'ee of Wu-sung.

(PREFACE CONTINUED BY RICCI.)

The all-important aim of scholarly study is the (2) Advancement of Knowledge; and that must take its rise from a clear understanding of the principles of nature. But the principles of nature are complex and abstruse, and the human mind is dull and purblind. There is no way of perfecting knowledge except that of starting from what is clear and so successively advancing to what is still undiscovered.

Our (3) remote western country, though of small extent, possesses literary institutions which in respect of the material sciences analytically pursued are superior to those of all other states. And hence books which discuss the principles of things are exceeding numerous and full.

Our students take it as an axiom in their discussions, that only *what can be proved* is of moment, and that mere *opinion* must be rejected. For they agree that the investigation of the principles (of things) begets knowledge; but opinion can but beget opinion after all.

Knowledge implies the absence of doubt; but opinion ever carries along with it (the possibility of) doubt.

(1) The celebrated Paul Seu of Sikawei (Seu-kea-wei) near Shanghai (here called by its classical name Wu-sung), who with his grand-daughter Candida were zealous Christians; and at the same time were much honoured by the Chinese for their good deeds. His conversion seems to have taken place about the time of his admission to the Han-lin. Huc's *Christianisme* contains interesting particulars.

(2) Ta-heo p. 222. Ed. Legge.

(3) 陬 angular, in a corner. Query does he mean Italy? or Europe in general? Michael Angelo and Macchiavelli were dead. Galileo was still living, and not yet condemned for heresy.

The philosophy of the abstract and abstruse, though argued upon correct (principles of) demonstration, can never quite expel doubt. (Since) it is always possible for another (1) method (of discussion) to find a flaw (in yours). It can induce assent; but it cannot breed a faith which entirely excludes the possibility of mistake. Metaphysics.

Only the science of the real and the evident cuts up and disperses every kind of suspicion, and is able to compel a full assent, leaving no opportunity for another method to impugn it. Physics.

The knowledge which results is at once deep and solidly established. In this category mathematics holds the highest place.

Mathematics deals entirely with the *parts* and *limits* of things. The *parts;*—as in the case of things divided, so as to occasion multitude; when (mathematics) will show *how many* they are; the *limits*, in the case of integers, when it demonstrates *how great* they are.

Number and *degree* may be conceived of apart from matter and discussed in the abstract, and then for numbers we have *arithmetic;* and for degree *geometry.* Pure Mathematics.

Or both may be conceived of in connection with matter and then speaking of *number* we have for instance the harmony produced by sounds properly matched, and the science of *music* with its (2) sharps and flats; and speaking of *degree* we have as an example the movements of the visible heavens which mark time, and the sciences of *Astronomy* and *Chronology.* Mixed Mathematics.

These (3) four main branches subdivide into a hundred streams. One measures the magnitude of the universe; as the thickness of the (4) successive superposed heavenly spheres, the distance from the earth of the sun moon and stars, and their comparative magnitudes, the diameter of the earth and distances on its surface; also the heights of mountains and hills, lofty buildings of all kinds, the depth of pits and valleys, the mutual distance of two places, the area and boundaries of fields, cities, and mansions, the solid content of storehouses, piles of goods, and large vessels. Another subdivision computes (5) locality, so as to explain the sequence of the seasons, the varying length of day and night and the hours of Trigonometry and Conics.

(1) Or perhaps *hypothesis.*

(2) 律呂 rather perhaps *notes* and *intervals.*

(3) Namely Arithmetic and Geometry, pure and mixed.

(4) 各重天

(5) Query, the place of the earth in the solar system.

sunrise and sunset, and thus deduce (1) latitude and longitude; (2) the three commencements of the year, the equinoxes and solstices, the (3) days of opening and shutting, the year for the intercalary month, the month for an additional day.

Mechanics and Hydrostatics.

Another subdivision constructs instruments for observing the form of heaven and earth, and the sequence and place in the ecliptic of the (4) Seven Directors; for transmitting, the (5) eight sounds, and marking the passage of time by a self sounding (clock) so as to facilitate the occupations of the people, and (fix the time for) the sacrifice to (6) Shangte. Again another subdivision regulates the arts which work in water, earth, wood, and stone; builds cities, erects towers and stages, palaces and temples, from the roof to the foundation; opens canals, forms reservoirs and builds bridges. And all these not merely studying ornament and beauty, but securing by all means stability, so as to resist the wear and tear of any number of years.

Another constructs machinery to economise power in moving great weights both vertically and horizontally, so as to facilitate the transport of provisions, the supply of water, the draining of marshes, the irrigation of deserts, the (7) raising and lowering of vessels of all sizes.

These various machines either avail themselves of the force of wind, or depend on water power, or work by pulleys, or by (8) dams and valves or rely on a vacuum.

Again another subdivision investigates (9) the optical powers of the eye, so as on a plane diagram with graduates rectangles or

(1) A very hesitating version of 天地之方位

(2) *The three commencements*, vid: Lun-yu 162 note. Heaven's commencement is said to be in 子 *tsze* (the winter solstice), Earth's in 丑 *mau* (a month later), and Man's in 寅 *yin* (a month later still). *Opening* and *shutting*, perhaps spring and winter.

(3) See above.

(4) The seven directors, probably the Sun, Moon, and five planets, Mercury, Venus, Mars, Jupiter, Saturn. Dr. Legge. Shoo. p. 33.

(5) Query whether the *gamut*; or the sound made by the eight substances Metal, Stone, Silk, Bamboo, Gourd, Earth, Leather, Wood.

(6) Shangte as the name for God was not finally proscribed by Papal ordinance till the 18th century. It is possible that the *Imperial* worship of the idol Shangte is meant.

(7) Query in docking, or by canal-locks.

(8) 關捩 perhaps rather systems of cogwheels.

(9) Qu: Optics or *Perspective*? 目視勢

curves according to the figure of each object, to represent the different properties of distance, obliquity, elevation and the rest; to observe the (1) limits of distant objects, so as to get at their true forms; produce the effect of great size by a small drawing, and of distance by one close to the eye, represent a solid globe by means of circles, depict accurately the unevennesses of surface, and give the lights and shadows in views of buildings.

Another deals with Geography, from the general representation of the earth with its mountains and seas, to the separate maps of the five divisions of the earth and the four seas; every kingdom of each continent, and every island of each sea, with the provinces and departments, all laid down in miniature. The general maps answering to the points of the compass, the separate maps tallying with the general one; and all so proportioned as to avoid mistake and confusion. So that from the (2) *chang*, feet, inches, and tenths (of the map) you may compute any distances whatever by land or sea; learn the great from the small, and distance from what is close at hand; thus proving the charts useful as an itinerary for land and sea without confusion or mistake. Geography.

These are some of the branches which depend *directly* upon the general science of Mathematics.

For the rest whether they are concerned with higher or lower matters all without exception depend on mathematics to establish their principles of working.

For example *the statesman* ought to be thoroughly familiar with the configuration of the frontier, the distance thence to foreign states and the extent of their territory, so as to know how with appropriate (3) ceremony to receive and dismiss their respective envoys; and to be ready for unforeseen chances, lest he be either needlessly apprehensive, or recklessly secure. Statecraft.

If he neglect to estimate the productive powers and rate of consumption of his country, and the (4) receipts and expenditure of money and corn—he will be without *data* for the guidance of his administration.

(1) Qu: angular measure.
(2) The *chang* is ten Chinese feet.
(3) 議禮賓來往之儀
(4) Produce and expenditure of taxes.

If he knows nothing about (1) astronomy, and trusts to other persons' information, the confusion arising from false methods of computation will be great.

Agriculturists who have no knowledge beforehand of the seasons, will be at a loss when to sow and plant all the various crops; or to guard against the calamities of drought and flood, and thus secure the (2) very root of the commonwealth.

Medicine. The physician who cannot compute the paths of the sun, moon and planets, and their influence on the diseased body will perillously mistake concords for opposites, and applying at random (3) his drugs, and instruments, not only do no good, but, mayhap, inflict great injury. Many a time have we seen, through some trifling disorder, under the misapplication of (otherwise) efficacious drugs, young and hale men pass away before their time; simply because of ignorance of (4) astrology.

Commerce. The merchant who is a bad calculator, will be in the dark as to all questions of barter, interest, rules of partnership, (and the like); and he will either be injuring his partner or be wronged by his partner, either alternative alike intolerable.

War. Now I have no time to set forth all the branches of study that make use of mathematical methods, but *the military art*, the most important to the state, that on which depend our security and our danger, has the most necessary dependence of them all upon this science. Wherefore for the commander of knowledge and courage, it is most necessary to have first studied mathematics. Otherwise though knowledge and valour are present, they will prove of no use. Of course the good general does not give his mind to questions of astronomy or chronology. The good general's anxiety is first about supplies of food and forage for his troops and horses, and the distance and natural features of his lines of march; their (5) dangerous or easy, open or confined (6), healthy or unhealthy character.

(1) With a view to the Calendar. A hint, perhaps, at the empiricism of both the Chinese and Mahometan astronomers which was afterwards exposed so unsparingly by Verbiest.

(2) Viz: supply of grain.

(3) 藥石針砭 The last two are probes of steel and stone respectively. I do not know 石

(4) 天時 in this connexion must be the influences of the heavenly bodies.

(5) 'Steep and rugged or easy.'

(6) 死生

In the second place he studies the best disposition of his forces, whether the whole host or its divisions. As for instance a circular array to mask numbers, or one with wings (horns) to conceal paucity of force, or one like a crescent moon to surround the enemy, or a wedge shaped one to break and scatter him.

Thirdly he (1) takes careful note of all weapons of offence and defence, thoroughly ascertaining their advantages and effectiveness, and comparative excellence under various circumstances, and ever proceeding in the course of improvement. He is well read in the historical examples of various states, and knows that the invention of a new and ingenious weapon has never failed to carry with it victory in attack, or else security in defence. There is nothing in beating few with many, or weak with strong forces; but to vanquish a numerous and mighty host with a small and weak one is the feat of none but the gifted captain of knowledge.

I have heard that in the West some sixteen hundred years ago, before the general diffusion of (2) Christianity, when the different states were mostly united (under one rule), among them there was a famous captain who, with a few beaten troops matched against a host of tenfold strength, held an insulated and dangerous fort and repulsed all attacks whether by sea or land. And likewise in China the renowned men who, from time to time, (3) like Kung-shu and Mih-tih, 'nine times attacked, nine times repulsed the foe,' performed such deeds by no other secret than their great skill in mathematics.

Hence we may see that the connexion of this science with human affairs is of the greatest and most important nature. And therefore men of spirit, the heroes who have given principles to the world, whether by the practice that goes before or the subsequent (work of) tradition, have never ceased in the world; but have kept adding light and extent (to the science) and making the commentaries on it fuller and fuller.

However about the middle age of antiquity our western schools produced one noted philosopher named Euclid, who in mathematical science far outstripped his predecessors and instructed with unusual luminousness those who were afterwards to enter upon

(1) A hint to the Ming which the Tartar afterwards attended to, when he induced Ricci's successors to cast heavy ordnance to assist him in crushing the remains of the Chinese power.

(2) 天主教

(3) See Mencius p. 161.

those paths. His definitions were very numerous and subtle. Of the works put forth by him during a life time, not a single sentence can be doubted or questioned. But his *elements* are especially solid and trustworthy. What is called the *elements* is the demonstration of mathematical *first principles*. Every one who discourses (on mathematics) must start with these. Hence his successors lauded him with this saying: Euclid in his other books excelled other men; in this book he outdid himself.

Now, after a thorough (1) trial of the book, his method and sequence are altogether surprising.

At the commencement of his propositions he first exhibits *definitions*; then states *axioms* on which the *propositions* depend; and then produces his propositions (2). Each proposition has its *statement*, its *construction*, and its *demonstration*. Every point ascertained becomes the foundation for a succeeding (argument).

In the thirteen books one line of argument runs through five hundred or more propositions: book having a mutual interdependence on book and proposition on proposition. (And the sequence is essential). Nothing could be placed earlier or later than it actually is. There is a close connexion and mutual succession without break to the very end.

It was said above that the (3) exact sciences are very easy and clear. By a gradually accumulating argument they end in developing what is most abstruse. If you look cursorily at one or two of the later propositions, their assertions, difficult as they are of investigation, will also prove hard to believe. But when you take the early proposition as your ground of proof, and at each step (see) the seal of evidence, stage after stage opens out, till the meaning lies plain (4) like the eye-brows, more and more fully explicated, so that you shall at last smile (with pleasure).

During the thousand and odd years since (Euclid) there have not wanted eager and strenuous disputants; but the result of the earnest scrutiny of a whole lifetime has been that (5) they could not cavil at a single word.

(1) "Taste;" meaning the examination and appreciation of so many ages.

(2) Mr. Wylie renders; "the propositions are accompanied by explanations of theorems, constructions of problems, and scholia."

(3) 實理

(4) I cannot illustrate this metaphor from Chinese classical literature.

(5) This will hardly be maintained now.

As to those who have devoted themselves to the geometry, although of divine perspicacity and favoured by heaven, they have all been obliged to use the Elements as their ladder of ascent.

Until this book is mastered, whoever would take up a position within the (1) circle (of science), as a *learner* he will gain no help for his mind, and yet more as a *teacher* he will lack this (indispensable) help in his discourse.

In our western schools as it has been already said, the ten thousand books, to speak in round numbers, of the hundred sciences which depend on geometry all take this book as a canonical authority, and adduce it as proof whenever they establish a proposition. In using other works it is necessary to quote the name, but in adducing this book one merely says such a proposition of such a book. So that you may see that it is the daily meat and drink of geometricians.

The present age has seen the rise of another famous philosopher, who was Mateo's principal master in mathematical studies. His name is master Clavius; and he has both enlarged and considerably elucidated this science.

(2) In early life when Mateo was travelling in the west, in every renowned state, wherever he met with high and distinguished houses, it was the general talk that, whatever might happen in the future, for all that went before the present age, Master Clavius' achievements in mathematics left him without an equal.

(3) The result of this master's long and accurate studies in Euclid is a collection of expository notes, and additional and continuatory matter amounting to two books. So that in all we have, with the original, fifteen books. Besides, he introduced into each book certain new demonstrations of the same general character. And thus the work is as detailed and complete as possible, a very ford or bridge for future students, leaving absolutely nothing to be desired.

(1) 道

(2) Clavius' employment in the reform of the calendar, and the controversy to which this led him with distinguished men, would necessarily render him famous among his contemporaries. He was attacked more than once by Scaliger and as often replied.

(3) *His two books* are apparently confounded with the XIV and XV books, which are ascribed to Hypsicles, about A.D. 550. Mr. Wylie says that Ricci in projecting a version of the whole of Euclid probably intended to substitute Clavius' for the ancient books XIV and XV. See preface to Mr. Wylie's edition of Euclid in Chinese.

From Mateo's first arrival in China he observed that whilst there was no lack of confidence on the part either of the students or the text books in geometry, there was nothing, so far as he could see, of the nature of (1) discussions of the principles. But without root or basis it is difficult to build. And thus the best intellects failed both in practice and discourse in demonstrating the *rationale* (of the science). What was correct failed to be clearly proved; and when they were mistaken no one could discriminate (the results) from what was right.

I had at that time already a desire to translate this book and offer it for the use (2) of the scholars and gentles of the day, as a grateful acknowledgement of the courtesy with which they have received me a stranger. But my lack of ability, and the entire difference between the grammars of the east and west (deterred me). In seeking words and expressions (3) (in the one language to represent those of the other) there were ever many deficiencies.

No doubt in *speaking* something may be done with effort; but when you take pen in hand to *write* it becomes a difficulty indeed. From that time onward I often met scholars of spirit who by suggestions or encouragements (moved me to proceed). But I was ever afraid of failure, and of commencing merely to desist. Alas, (said I) this is but a superficial acquaintance with the science that I possess, the discussion of the merest elements of form. Thus did I debate with myself. (But at length) I concluded: It is but the difficulty of the first step; where there's a will the work is done. And so I waited till the present time.

In the year (4) Kang-tsze, Mateo had occasion to go to the capital with presents of homage, and sojourned there. During the winter of (5) Kwei-mau, Seu T'hae-sze Sien-sheng of (6) Keang-soo came (to Peking). The (7) T'hae-sze, naturally a person of fine parts, and long practised in elegant literature, and who, moreover, had for a considerable time been intimate with

(1) Qu: the "Elements" viz: of Euclid.

(2) 當世賢人君子

(3) 相

(4) A.D. 1600-1601 Dr. Williams says he arrived in Peking in January 1601 bringing presents for the Emperor by special permission.

(5) A.D. 1603.

(6) 吳下

(7) One of the names for members of the Han-lin. It is here given in advance, since he did not get that degree till afterwards.

me and my brethren, foreigners (like myself), conceived the idea of sharing the task of translation with me and so rendering easy the production of our book. (1) As for the time he designed to come to it, along with me. In the spring however (qu: 1604) being recommended (for the examinations in) the Southern Palace he was chosen (2) Shoo-ch'ang. But just at the time when he was reading the more abstruse class of Chinese books, I had opportunities of conversation with him, and frequently discussed the high doctrine of the Lord of Heaven putting morality and (3) devotion in the most prominent place. We had no leisure then for this mundane and unspiritual affair. (Viz: of mathematical discourse. But my teacher takes it to mean; "He had no time to think of political affairs." 士苴 being a fine phrase for these, as compared with philosophy).

Last autumn however he interrogated me about our western schools and (4) systems of promotion; to which I made answer by speaking of our natural philosophy, and so spoke of geometry and the like. This led to my mentioning the accuracy of this work, and explaining the difficulty of translating it and the manner of my relinquishing the task a while ago. The Sien-sheng said; "our ancient worthies used to say, 'it were a shame for a scholar to be ignorant of any one thing.' If now this branch of science has been actually lost to us, it amounts to this that our students are all groping in the dark. As I have met with the book; and met too with you, Sir, a person so modest and so liberal, if you please to (5) entrust (the matter) to me, I shall of course think nothing of the labour, and lose no time in going to work. (Else) the loss will lie at the door of our generation."

"Ah me! When I shrank from difficulty it grew as a matter of course. I faced it and it as naturally shrunk into insignificance. We must surely accomplish the task, Sien-sheng." We addressed ourselves to the work. He bade me dictate, and himself took down my sentences with pen and ink. It was considered and reconsidered again, with a view to express the sense of the original in Chinese phrase. Again and again it was revised; three suc-

(1) This whole passage, especially the words 於時以計偕至 is to me very hard. I do not think I have given the sense—(if any sense) correctly.
(2) That is member of the Han-lin, of a certain class.
(3) 昭事 Qu: an ellipsis of 昭事上帝 Shiking. p. 433. Legge.
(4) Qu: 舉業
(5) Namely of giving a classical shape to Ricci's dictations from Euclid.

cessive draughts in all being prepared. The Sien-sheng's zeal forbade my requiting him with slothfulness. In the present spring, the most important and first portion of the work, the first six books, is at length finished.

But (1) the original text of Euclid does not itself transmit to us its (ultimate) idea. Of master Clavius' work we have translated only the preliminary discourse.

The T'hae-sze in his eager zeal wished to complete it. But said I: "let us pause. Put forth this first that persons of like taste with us may prove by practice the usefulness (of the treatise); and then with due deliberation consult for the remainder." The T'hae-sze replied: "be it so. If it be well that this book should be completed; why should it depend only on me." He desisted therefore from the translation, and sent it to be engraved; with the one aim of publishing it for the common advantage; impatient as he was of having it kept a secret even for a day.

When it was ready for printing Mateo made a brief statement of its purport, to place at the commencement; which he knows well to be wanting in elegance, and would shrink from foisting into a connexion with this (2) splendid record of (mathematical) operations. Nevertheless, in however lame a manner he has made some introduction to the main gist of our work, and (recorded) the occasions of the translation, that those who make use of it in time to come may know the intention of its communication to them; and considering the painful efforts (we have made) I hope they may practice (its principles) more and more thoroughly; so as to complete the fair work, and enable all men of instructed mind to pursue heartily the study of the exact sciences, and prove their efficacy in all the manifold divisions of polite study set forth above; thereby attaining merit and offering service to the empire.

So too may Mateo and his brethren, these many years past entertained, though foreigners, with the consideration of ministers of state, repay one tenthousandth part the immensity of the (imperial) grace.

Respectfully written in (3) Tin-wei of Wan-leih by the European Mateo Ricci.

(12) 已不遺旨 Qu: *rather*. "We have not neglected (fully given) the gist of Euclid's original text."

(13) 述作之林

(14) A. D. 1607, three years before Ricci's death. *Wan-leih* A. D. 1571 to 1619.

ARTICLE VII.

THE LIFE AND WORKS OF HAN YÜ OR HAN WÊN-KUNG.*

By T. WATTERS.

THE period during which the T'ang dynasty ruled in China, extending over nearly three centuries from A. D. 618 to 907, is one of the most interesting in this country's history. Religion, mainly in the form of Buddhism, prevailed then to a greater extent than at any other time before or since. Along with it came Poetry and the Fine Arts, but at the same time moral and intellectual decadence. These statements refer more to the middle and end of the dynasty than to the period of the illustrious sovereigns who adorned its commencement. The martial and political virtues of its founder and the dashing exploits of his immediate successors are for ever famous, but their descendants were generally mean and ignoble—slaves to women, and eunuchs, and monks. Yet the good institutions which the early rulers had devised survived the feebleness and misrule of their posterity, and among them one of the most excellent was that which made mental accomplishments the highway to official employment, thus giving a stimulus to the cultivation of literature. To this must be added the rapid spread of a foreign religion introducing new ideas about man and nature. Hence arose learned ecclesiastics, poets, and essayists who surrounded this dynasty with glory and fame, and among these few have earned more honorable place than the subject of the present memoir, viz:—Han Yü or Han Wên-kung. Yet I would not have thought of writing about him had it not seemed to me that he has been rather overlooked by Western writers on China. Remusat, Pauthier, Julien, Davis, and Williams tell us little or nothing about him, and one of these celebrated sinologues actually calls him Han Yin (though this may be a typographical mistake). In Mr. Wylie's very excellent Notes on Chinese Literature his name

* Read before the Society on April 17th, 1872.

and works are utterly unmentioned, and Mr. Edkins is, so far as I know, the only Western writer who shows an acquaintance with them. Should it be, however, my own ignorance which has led to the above statements I hope it will still be a not useless work to give a brief outline of the life and literary remains of the illustrious individual in question.

Han Yü (韓愈), then, whose style was T'ui-chï (退之), was a scion of an illustrious family. One of his remote ancestors had been honoured by the title of Prince as a reward for the services he had rendered a ruler of the latter Wei dynasty. His father, Chung-ch'ing (仲卿), was in early life Magistrate of the Wu-ch'ang district in Hupeh, and afterwards a high officer at the capital. Han Yü was born in A. D. 768, the sixth year of the reign of Tai-tsung the eighth Emperor of the T'ang dynasty. The place of his birth was Nan-yang in Honan, though he generally described himself as a native of Ch'ang-li (昌黎). This was a city of Yung-ping-foo in Chihli, and as his posthumous title was derived from it, the family may have regarded it as their ancestral home. When only three years of age Yü was left an orphan by the death of his father, but he was immediately taken charge of by his cousin Hui. This last on being officially exiled to the south of the empire took the child with him but died shortly afterwards. The little orphan was, however, taken care of by Hui's widow, who seems to have won his affections by her kind and amiable treatment, and it is recorded that on her death her foster child observed the full period of a year's mourning for her. It is stated that Yü was a precocious boy, having a wonderful memory and facility for learning so that he was able to learn several hundreds of characters in a day. But of his infancy and boyhood the biographer has told us nothing more. We learn from himself that his education was confined to books, and that he was not taught any art or craft by which to earn a subsistence should he fail to obtain official or literary employment.

So he grew up a mere student, and we are informed that he became proficient not only in the ancient classics but also in modern miscellaneous literature. When 24 years old he was fortunate enough to be recommended for examination for the Chin-shï degree which he obtained. The Chin-shï of that time was very different from the literary degree which now bears the name. It corresponded somewhat to the Hsiu-tsai of the present, although the subjects of examination for the former are unlike those with

which the candidates for the latter are required to be acquainted. The Chinese biographer is provokingly reticent respecting the domestic affairs of Yü, and does not tell us when he married or who was his wife. It is not improbable, however, that he was a married man about the time of his examination, as not long afterwards he writes of himself as being a husband and father.

It was the time-honoured custom at this period for the high officers throughout the empire to bring to their sovereign's notice those men in their jurisdictions who were remarkable for the possession of high moral character and intellectual abilities that they might be employed in the administration of government. According to his own testimony Han Yü was eagerly desirous of official life, and was considerably disappointed at not obtaining a recommendation immediately after he obtained his degree. The destined time, however, arrived at last, and he received a subordinate appointment as assistant to an officer corresponding somewhat to a modern Intendant of Circuit or Taotai. Shortly afterwards he gained great distinction by the services he rendered in suppressing a military revolt at Pien-chow, the present K'ai-fêng-foo in Honan, and at that time the Eastern Capital. In a poetical letter to a friend he describes the hardships he endured on the way to this city and his distress about his wife and child who had remained within its enclosures. His success on this occasion obtained for him what he had long coveted, a congenial post at the western capital—Si-an-foo. His enjoyment of this office was not, however, of long duration. In 803 he offended the reigning Emperor, Tê-tsung, by a strongly-worked memorial about an abuse at the palace, and was sent away to Kwangtung as Magistrate of Yang-shan. Three years afterwards, in the reign of the Emperor Hsien-tsung, we find him back in the capital, and filling a very important and honorable post. He could not, however, keep his place and was again sent away to the provinces. About this time a petty mandarin at a place called Hwa-yin was denounced to the Throne by his superior and consequently deprived of office. A new chief came who coincided with the views of his predecessor and was disposed to take sharp measures with the offender. Han Yü happened to pass through the place at the time, and hearing some rumours about complicity between the old and new chiefs he instantly accused the latter to the Emperor of acting unfairly. An investigation was ordered, the result of which was that the hot-headed Yü was declared to be in the wrong, and he was ac-

cordingly sentenced to degradation. The life of a Chinese mandarin is usually one of ups and downs, and of this the career of the one under notice is an excellent instance. He was soon afterwards again recalled to the capital—Si-an-foo, and appointed to an office in the Criminal Board.

At this time there was a very serious disaffection at Huai-si and other places in the principality of Ts'ai, part of the present Iu-ning-foo in Honan. Han Yü memorialised the Throne on the subject, representing the state of affairs as very critical but not beyond remedy if the Emperor at once adopted decisive measures. A Minister of State who had a different opinion on the subject got angry here-upon, brought a wanton accusation against Han Yü, and had him removed to an inferior office. But shortly afterwards Yü's counsel prevailed, and he assisted so successfully in restoring peace and loyalty in Ts'ai that he was rewarded on his return with the post of Vice-President of the Criminal Board.

We now come to the most important event of his life, and that which has crowned his name with unfading glory. In the year 819 the Emperor Hsien-tsung, a devoted follower of Buddhism, ordered a grand procession to escort a reputed finger-bone of Gautama Buddha from a frontier city to the capital, and after a three-days' stay within the palace to the various Buddhist temples in the city. The pious orthodoxy of the Vice-President was offended, and he sent in an angry and spirited remonstrance called a Memorial respecting the Buddha's Bone. This is a very celebrated document and has been frequently reprinted by iconoclastic Confucianists. It rebukes His Majesty in no gentle terms —shows that Buddhism was the invention of barbarians and of recent importation—and that the Emperors who lived before its introduction into the country enjoyed long lives and reigned many years while those who lived since that event had few and evil years. The Emperor became highly enraged and wanted to have his fiery servant beheaded, but some friends interceded for him and soothed the Imperial anger.

He was, however, dismissed from Court and sent to serve as Prefect at Ch'ao-chow, a city in the East of Kwangtung and now unfortunately a Treaty Port. This reverse humbled Yü considerably and on arriving at his post he wrote a repentant memorial confessing his sin and thanking His Majesty for the matchless generosity which had spared a forfeited life. That was a sad and dreary day for him on which he set off from the capital to cross

the myth-haunted mountains and take up his residence among creatures ranked with spirits and hobgoblins—in a district lying far out of the Imperial Sunshine and cursed with pestilence and plague. After a long and wearisome journey of a month and twenty-five days he reached Ch'ao-chow-foo—even now a city of gamblers and gods, and possessing not a single grace or merit to save it from unqualified execration save only this fact that Han Yü once lived within its precincts.

At the time of his residence here the district was inhabited by ignorant barbarians who had advanced from the savage state only so far as to cultivate the willing fields and rear domestic animals. Among all the people there was only one man of any education with whom the new Prefect could hold intercourse, and this man became his librarian. Strange to relate Yü formed an intimate friendship with a Buddhist monk here, and scandal whispered that he too had joined the crowd and forsaken the old path of Confucianism—a scandal which he indignantly refuted.

When Han Yü arrived at Ch'ao-chow he found the inhabitants suffering from the ravages of a huge brute which haunted the river flowing past their city. This monstrous alligator-like creature had long harassed the district making frequent excursions on shore and carrying off fowl and cattle and sometimes even human beings. Many and various means had been tried to kill or capture the horrid brute but all hitherto in vain. Now the people came to their Prefect, and told him their story, and implored him, as one who had dared the spiritual powers to rid them of the monster that had wrought such dreadful woe. He at once promised to comply with their request and proceeded to make personal investigation. One evening he came to the river's bank and standing close by the water he ordered his attendants to throw a hen and a sheep into the river. When this was done he himself literally read the alligator a lesson—expostulating with the beast on the wickedness of his conduct and his want of respect for the ancient sages and the ruling Emperor—and recommending him to return to the ocean his proper sphere, there to mix with whales and leviathans his proper associates—and threatening him with further and more violent proceedings in case he failed to obey. Great is the power over the abnormal births of nature which that man possesses who can stand upright before the gods nor feel any pulse of fear! Exorcised by the mighty words of the mandarin the monster at last had to own a superior power. In his

despairing rage he made the river seethe and boil and almost dried it up—a fact which satisfactorily accounts for the shallowness of the river to this day—then wriggled his hated length away from Ch'ao-chow-foo for ever.*

Han Yü performed several other useful and benevolent actions at this place, but at the end of eight months he was transferred to Yang-chow in Kiangsi. The Emperor was willing indeed to recall him to the Capital but his enemies at Court prevailed for the time at least. One of the bitterest of these was Hwang-foo who hated the frank honesty of Yü and represented him to the Emperor as a madman. At Yuan-chow also his name is associated with noble deeds, and he abolished an old but evil custom which allowed men and women to pawn themselves and their children to the officials for money, and the latter to confiscate as slaves all who were unredeemed. He even devised a means by which 700 of such slaves were purchased from their owners and restored to their relatives.

Once more he returned to the capital and was appointed Vice-President of the Board of War. On the breaking out of a mutiny, however, at Chêng-chow in Chihli he was sent thither to restore loyalty, and was again successful. He came back triumphant and had new honours heaped on him, being made Vice-President of the Board of Ceremonies, but he could never agree well with his chiefs and so was again transferred. He was fortunate enough, however, to be allowed to remain within the genial influences of the Court until his death which happened in the year 823, in the reign of the Emperor Mu-tsung.

The posthumous title President of the Board of Ceremonies was conferred on him, and he was honoured with the epithet Wên or accomplished, to which the customary Kung, a courteous designation, was appended and hence he is generally known as Han-wên-kung. Long after his death in the year 1084, the 16th of the reign of Shên-tsung of the Sung Dynasty, he was ennobled as Ch'ang-li Po or Earl of Ch'angli, and he is frequently described as Ch'ang-li-hsien-shêng (昌黎先生), the Ch'ang-li gentleman or teacher. There have also been temples erected to his memory in several places. One of these is at Ch'ao-chow-foo on the western slope of the Pen-rest hill which rises gently from the

* According to another account, however, the monster reappeared in the Sung Dynasty and was finally despatched with tridents and spears.

left bank of the river opposite the east side of the city. It contains a large image of Han-wên-kung and small images of two of his disciples, besides the memorial tablets of some of his descendants. Over the door is a board bearing the inscription—In merit not beneath Mencius,—and within the building is another inscribed —In merit not beneath Yü—(the semi-fabulous Emperor who assisted Shun and founded the Hsia Dynasty about B. C. 2200).

Here the quiet rooms, with the shady trees outside, and the purling of the tiny half-hidden brook, and the daily view of the sun setting behind the hills in the distance all invite to gentle musing and solemn contemplation. Hence the temple is used as a literary retreat by young men who devote themselves to study and who are competing for their degrees.

The Taotai of the Circuit also is obliged to repair to it officially once in the spring and once in the autumn every year and do reverence at the shrine of the sage. Within the city walls is his ancestral temple, now utterly neglected—tenanted by bats and overgrown with weeds. Long after Han Yü's death the celebrated poet Tung-p'o was driven by a similar cruel fate to Hui-chow another city in Kwangtung. The inhabitants of Ch'ao-chow requested him to write a eulogy for their former Prefect, and he willingly complied with their request. It was engraved in stone and remains to this day. The ode which he appended ends thus:

"There was no one to play the lyre in heaven and god was deeply distressed—Wishing to continue the singing he sent the sorcerer Yang to summon [Han Yü] from earth. With pied oxen, and sheep, and foul I do him worship offering him wine from my own horn—And lichees bright red and bananas all yellow. That he did not tarry a little I weep and wail, and with fluttering robes and dishevelled hair I go down into the waste of men."

We do not know how many of his children survived Han-wên-kung, but it is evident that at least one son was alive after his father's death. The Hans, as has been stated, were an illustrious family, and, besides those already mentioned, several other members of it became eminent men. Han Yü's father's brothers were officials of considerable standing. His own son was a precocious child and attained to great literary distinction. His nephew, Hsiang-tzŭ, from whom the bridge at Ch'ao-chow-foo derived its name, was also an infantine genius. He grew up to be a clever but eccentric man and finally obtained immortality and divinity, being worshipped as one of the Pa-hsien or Eight Genii. In the

temple near Ch'ao-chow-foo are also, as I have stated, tablets to several descendants of Han Yü who had deserved well of their country as scholars and officials. The Chinese believe to a certain extent in Hereditary Genius, or, according to their saying, that the Dragon produces a dragon and the Phœnix produces a phœnix. A very good example of this transmission of genius is presented by this family, and I believe that the ancestral talents have been inherited to a large extent by some of its very recent representatives.

Of Han-wên-kung's personal appearance and habits we know very little. He seems to have been troubled with sore eyes, and to have had originally a weak constitution which his residence at Ch'ao-chow-foo greatly impaired. He was fond of fishing, and of solitary walks in the country, though he was a man of social habits, and not unwilling to take a glass too much on a festive occasion. His moral character was such as is seldom met with among Chinese officials. In all his constitution there was not a trace of guile or deceit. He possessed in a large measure those qualities which we so much admire, and the absence of which we lament in Orientals—frankness and pluck. Indeed with him these virtues leaned conspicuously to the side of faults, and his boldness of speech and audacity of action brought him into frequent trouble. Whether before the despot on the throne, the arbitrary Gods, a rebellious army, or a revolted city his courage never failed him, when all others were renegades from Confucianism, and running after the fashionable heresy imported from India, Yü remained constant, walking in almost solitary sternness in the old path of orthodoxy.

He was an uncompromising Conservative—in religion, politics, social life and education always a Conservative. He was true and constant in friendship, ever ready to assist those in need of help and never cringing or toadying to those who were socially above him. It is affectionately recorded of him that he got the orphan daughters among his poor relatives married, and we know that he assisted in the education of the boys. Fiery and impulsive, however, he was always getting himself into trouble, and he was evidently fond of having his own way. Modesty and humility were qualities which never set well on him though he could assume them when convinced they were necessary. His learning was profound and extensive, but he wore it all "lightly as a flower;" and from his earliest years he was noted for a sharpness and viva-

city of intellect which never forsook him. As a public servant Han Yü was more distinguished for a dauntless and generous spirit than for a dexterous and long-sighted policy. He was acknowledged to be a man of unswerving integrity and stedfast principle.

Most of the Emperors under whom he served were men of little worth, generally ruled by eunuchs and priests, and inattentive to the great interests of the Empire. Yet he praises them on several occasions and even when reproaching them for shameful crimes. He had to expostulate with one of them, in a memorial, about the retention of large rewards which His Majesty had offered for the arrest of certain banditti. That Government was competent to cure every evil and remedy every defect in the body politic was a firm conviction of Han Yü's. Accordingly on the occasion of a great dearness and scarcity of coin we find him suggesting the following remedial expedients:—that producers and mechanics should be allowed to pay duties and taxes in the articles of their industry instead of in money—that it should be forbidden to any one to use copper in the fabrication of bells, images, and similar objects—that the exchangeable value of the copper coin in circulation at the time should be altered, so that one coin would represent five—and that as supplementary to these the government employés receive two-thirds of their pay in the commodities accumulated in the Revenue Offices and the remaining one-third in the altered coins. In the year 809 there was a drought which was followed by a famine, and the Emperor, Hsien-tsung, issued an edict ordering the literary examinations at the capital to be deferred, alleging as his reason for doing so that the crowds of competitors filling the city would greatly increase the distress among the residents. Han Yü memorialised the throne against this, and hinted that the course adopted was rather likely to induce further drought. In another public document he warns the rulers of the danger of not keeping the frontiers well defended. The country people, he says, are clever enough to make fences and ditches against wild beasts; and dwellers in cities know to keep high walls and strong bars against burglars. Yet Government does not know to be ready though on its borders are dangerous enemies; and, he adds, to treat matters lightly is the greatest of national misfortunes. Han Yü was too impulsive and outspoken to make a very good official, and he had always enemies at Court who made the most of his errors and bursts of passion. He was

also undoubtedly a rather unpractical man, dreaming of a Utopia and wishing to have the actual world conform to his dream. The glories and virtues which he fondly imagined for the ignominious rulers whom he served were derived from the Emperors of antiquity whose legends he had read in early youth. Hence to us he seems guilty of gross flattery when he ascribes excellences to men who, as he knew to his cost, were utterly devoid of them. In his view, however, the sublime virtues went with the Supreme Decree, and they remained at least latent even in the worst of the T'angs.

I come now to consider Han-wên-kung as an author. His literary remains were collected after his death and published by Li Han, an ardent admirer and devoted desciple. The best and most complete edition of his works, so far as I know, is that which was brought out in 1728 by Ko Chêng-hu (葛正笏) from blocks which had been cut for one of his ancestors. The title of the work, which is in 10 volumes, is Ch'ang-li-hsien-shêng-ch'uan-chi (昌黎先生全集), or The Complete Works of the Ch'ang-li Teacher.* This edition is badly arranged, contains many doubtful or erroneous characters, and is unaccompanied by note or comment. In the introduction, however, much useful information is given respecting the life of the author, the history of his works, and other matters of interest. Han Yü's writings as they appear in this edition consist of poems, miscellaneous essays on ethics and politics, letters, official documents, an account of the reign of Shun-tsung who occupied the throne during the year 805, and a collection of detached compositions on various subjects.

The prose writings of our author are generally more admired than his poetry which was eclipsed by the works of the celebrated poets who imparted to the T'ang dynasty its greatest glory. Yet Tung-p'o says of him that he soared with Li and T'u and rose far above Ch'i and Chĭ until he vanished from their sight. His essays are to this day considered models of a graceful yet nervous style, abounding in neat and concise phrases, and surprising the reader by its sharpness and suddenness of movement. He yields to few Chinese authors in command of language and in a happy selection of phrases and epithets. To a native *savant* he is also peculiarly charming on account of the hints and allusions to the

* It is from this book that I have derived nearly all the information I possess about Han-wên-kung.

ancient classics which abound in his writings. For his works are not such that he who runs may read and understand them. On the contrary they are composed in terse concise sentences couched in classic language, and never intended for Philistines. Some have accused him of being original in thought and expression but this terrible charge has been successfully repelled by others who assert that he was in both a follower of ancient orthodox tradition.

His poems are divided into two kinds, the antique and the regular. Those of the former class have a considerable license as to the number of syllables in each line and the nature of the rhymes, while those of the latter kind are bound down to the observance of established laws. Many of his odes and poetical epistles are beautiful and interesting, sometimes reminding us of other and dearer singers. A short one addressed to Li Kwan runs thus:—

"In the far north is a caged bird—in the southern ocean a hidden fish—broad waters and lands keep them apart so that they can neither see nor hear each other. One day the winds and clouds bring them together, and they are transmuted and become one creature. So who will speak of length of distance [as separating us]? For [hearts] stirred with emotion are swift as spirits. When twenty-five years of age I sought for a friend—not knowing men I sang sadly in the public places of the western capital, and joined friendship with you. Those who are at one in sentiments and pursuits do not discuss their mutual intellectual disparities. Let us be of good mettle, and never suffer stain or flaw—not as children mourn and whine because we are lowly and poor."

To another friend, Chên Yü, is addressed the following:—"Fallen leaf that cannot rest—broken sedge without a root—they flutter and float for ever apart. We being like these unexpectedly met for an instant—in midnight whispers we spoke together—the cold moon's light broad over head. Who can say the young feel no sorrow at parting? Our tears flowed until they soaked our clothes." Sunrise as observed from a hill at the seaside he speaks of as—"the sunwheel still held in the ocean waves—the fish and dragons leaping in terror, and utterring sad sad wailings—fantastic vapours purple and vermeil beaten out in spiral eddies. The golden duck soars on high and in a trice the world is bright with light."

Han Yü's published letters relate largely to official matters though many refer to private subjects. In style they are seldom if ever

colloquial but generally elegant and flowery. I transcribe a portion of one addressed to Mêng Tung-ye, a mandarin of high standing and good reputation and a very intimate friend of Han Yü. Neither place nor time is mentioned but the contents show that it must have been written about the year 802.

"I have been separated from you, dear Sir, for a long time, and judging from my own heart's thoughts of you I know that you are in anxious suspense about me. Haltered each by his public business we cannot come together. You know, dear Sir, whether I am happy or not being from day to day with men among whom you are never seen. Who is there to listen to me talking? Who to accompany me singing? My talk unlistened to, my song unaccompanied—going my way alone without a kindred spirit, without any one like minded in matters of conscience—you know whether my heart is glad. You, dear Sir, have lofty talents and a subtle genius—living in the world of the present you follow ancient principles—possessing no property you yet serve your parents with clothes and food, nor in any quarter violate filial piety. You are zealous in mental application and unsparing in bodily exertion. Though you are mixed up with an age defiled and defiling your mind goes back after the ancients and follows them. Your spiritual attainments make me quite distressed for myself. In the spring of last year I had the good luck to escape from the troubles of Pien-chow with my life, and having no other place I came here. My chief is an old friend, and pitying my extremity he gave me a residence at Chü-shang in Fu-li (a place in the Fêng-yang Prefecture of Kiangnan). When it came to autumn and I was about to take my leave he detained me on public business, so I have been idly quiet here for nearly a year. I have an idea of trying again to get away this autumn and going to the rivers and lakes in which I delight and of having the good luck to meet you at last. Li Hsi is to marry the daughter of my late early brother some day next month, and he ought to be here any day. Chang Ch'i is observing the period of mourning for his parent at Hochow. His family is very badly off and, as I was afraid you did not know, I have written for the purpose of telling you. I hope you will come and pay me a visit. Though it is a long way from your place to this yet if the whole journey is made by water you can count on arriving speedily. I shall look for you. The spring is now over and the weather is becoming warm. I wish you all domestic prosperity. My eye has become more

painful and I am dreadfully in the dumps, so I do not give you any more particulars. My respects twice over."

A tender air of melancholy breathes over this as over many others of Han Yü's letters leading us to believe that he had few sympathies with the age in which he lived. Though often sad and desponding about himself, however, his letters are always kind and courteous and they frequently give advice and cheerful encouragement to his younger friends.

The Memorial Inscriptions, eulogies on friends and others, and the documents which he prepared for various ceremonial occasions were generally of only local and often of merely current interest. I accordingly pass them over and proceed to give some account of his essays on ethical and other subjects. These have always been greatly admired by Chinese scholars not so much on account of the truths discussed in them as on account of their literary beauties. They do not enter very deeply into the investigation of great principles but rather treat in a sprightly, fanciful manner of what may be called popular philosophy. We may compare some of them with the best of Addison's contributions to the Spectator and some with the charming essays in Friends in Council; and they are as popular with refined Chinese as these are with Englishmen and Americans. In all Chinese books of Elegant Extracts at least one or two of these essays must appear, and the greatest favourits are the two which bear the titles of Yuan-tao (原道) and Yuan-kuei (原鬼) respectively. Here the word yuan has been variously interpreted as meaning the source and history of that which the following word denotes, or as meaning real or original. The former interpretation accords better with the contents of the essays and the latter with the genius of the language. We may perhaps translate it by the expression—an enquiry into the origin of, and Yuan-tao, Yuan-kuei will then mean an enquiry into the origin of the orthodox rule of life and of demons respectively. The former of these essays begins by defining certain ethical terms and explaining how the author's use of these differs from that of Laotzŭ. It then shows how orthodox Confucianism had waned and almost faded away out of the country under the baneful influences of Buddhism and Taoism. It next proceeds to give an account of the origin of civilisation, tracing every advance from savagedom to the action of individual Shêng-jên—the Heroes of Chinese antiquity. The institution of rulers and officers (which was the first step), the expulsion of noxious animals and the set-

tling of men on the central soil, the providing of clothing and food, the construction of houses instead of an unsafe perch in trees or unhealthy hole in the ground, the devising of mechanical implements, the institution of arts, trades, and all branches of culture owe their origin exclusively to the primeval Godlike Men. Had it not been for these the human race would have been long since extinct, for man has no feathery, or woolly, or scaly covering to protect him against cold and heat, nor claws and teeth with which he can struggle for his food. It then inveighs against Buddhism and Taoism which would do away with all that man had inherited, and bring him again near to the brutes. The Law of Life which Han Yü teaches is comprehended in the classic literature and the political and social institutions of the country; it is the Law which Yao transmitted to Shun, Shun to Yü, Yü to T'ang, T'ang to Wên Wang, Wu Wang, and Chow Kung, these to Confucius, and he to Mencius, on whose death the transmission ceased.

The Kuei, that is, demons or evil spirits, were and still are popularly believed in China as in other countries to cause all the misfortunes and sufferings that afflict men. It is against this superstition that Han Yü wrote his essay on demons, and his arguments respecting them are not unworthy of a Western Rationalist of the nineteenth century. I can only pretend to give in the translation of this as of the other writings of our author an approximate rendering of his meaning. It runs thus:—"Is that a demon which screams at a bridge and cannot be seen when you follow it with a light? No, a demon has no sound. Is that a demon which takes its stand in the hall but cannot be seen when you go to inspect it? No, a demon has no visible form. Is that a demon which bumps against me and cannot be caught when I grasp at it? No, how can a demon being destitute of sound and visible form have any force? Well, if a demon be without sound, without form, and without force, I suppose, that after all a demon does not exist? Now there are things possessing form but without sound, such are earth and stone; there are things possessing sound but without form, such are wind and thunder; there are things possessing both form and sound, such are men and beasts; and there are things destitute both of form and sound, such are demons and spirits. Granted—then what of those unnatural phenomena which affect people and things? They are of two kinds, demons and material objects. Now it is the normal condition of demons to be devoid of form and sound. When any one rebels

against heaven, goes counter to the people, or goes wrong in the common affairs of life, he violates the moral and social laws and so produces confusion in the elements of nature. In such cases the demon becomes visible through something possessing form and makes use of that which has sound in order to make retribution by sending down calamity and misfortune—the whole being the work of people themselves—and when its work is over it again returns to its normal condition. What do you call the material objects? Earth, stone, wind, thunder, man, and beasts being made with form and sound, and on the other hand demons and spirits being destitute of sound and form, the material objects of an unnatural kind are those which cannot have and cannot be without form and sound. Hence there is nothing to be depended on as to their emerging and interfering with people. Hence sometimes they visit people and bring misfortune, and sometimes they visit people and bring good fortune; and sometimes they visit people and bring neither misfortune nor blessing—according to the momentary circumstances of the individual visited." Ghosts and demons are thus according to Han-wên-kung the reproaches of a troubled conscience which imagination bodies forth in spectral monsters visible only to the mind's eye, or at the most mere subjective creations having nothing corresponding to them in the actual world. It is not by any demon that pain and misery are brought on man, they are the inevitable consequences of his own misconduct. Han Yü is similarly original in his views respecting the Ch'i-lin, the Peacock or some other *rara avis* of the early Chinese, usually translated by Phœnix. This bird is universally regarded as lucky, but as people know nothing about it, and as it cannot be referred to any species of existing animals, those who see it and do not recognise it rightly regard it as unlucky. It appears properly when a holy man is in power, and if such a man recognise a bird as the Ch'i-lin it is certainly lucky. Again we may say since it is its moral endowments and not its external appearance which makes the Ch'i-lin what it is, if it do not wait for the advent of the holy man it is rightly said to be unlucky.

The Yuan-hui (原毀) or examination of the essential of moral criticism is also a very charming essay, and worthy of being read. Its burden is that we should be rigorous and thorough in criticising ourselves and lenient and slack in criticising others. The leading men of his time, Han Yü says, were not so; on the contrary they exacted saintship in others while content to be themselves like

the multitude. People easily accord greatness to those who are their friends, or who do not interfere with their gains, or of whom they are afraid; and for opposite reasons they will refuse to acknowledge moral superiority in another. In the essay on man he includes under the term man savage tribes, birds, and beasts, just as heaven includes sun and moon and stars. He does not mean by this that a barbarian or a beast is a man. "If I point to a hill and ask if it is a hill, the answer yes is correct." Now a hill includes herbs, trees, birds, and beasts, but if I point to an herb and ask if it is a hill, the answer yes would be incorrect. As heaven is ruler over sun, moon, and stars—as earth is ruler over herds, trees, hills, and streams—so man is the lord of barbarians, birds, and beasts. In his essay on man's moral constitution he makes a threefold division into high, medium, and low moral natures—a division which Chu Hsi disposes of in a very summary manner.*

Another very interesting article is that on the Emperor Yü. Yao chose Shun to be his successor on the throne because Shun was the best of all his officers, and for a similar reason Shun chose Yü. This last, however, appointed his son to succeed him, and the question was, did Yü in this prove himself to be possessed of less illustrious virtue than his predecessors? To this Han-wên-kung replies that he did not. Yao and Shun consulted for the present but Yü was anxious lest in after generations struggles for the throne should arise. The two former sovereigns did great good to the empire, but Yü took deep forethought for its future. When the imperial power goes from father to son the element of uncertainty is removed, and the supposition that the son may turn out bad applies also to election. Neither men of great virtue nor men of great vice are of common occurrence. It was 400 years after Yü that the wicked sovereign Ch'ü (桀) arose, but it was also 400 years after Yü that T'ang (湯) and Yi-yin (伊尹) appeared—T'ang being the founder of the Shang dynasty and Yi-yin his celebrated minister.

I might quote from or refer to many more of these miscellanies, but it is time to conclude. Enough has been given, I hope, to present an outline of what Han-wên-kung did and thought. To me he seems to be a very good type of genuine Confucianists in their excellences and defects. Such as he was 1,000 years ago

* See the 朱子全書 Ch. 五十八

such are the orthodox of China to-day. With them as with him the far off past was a time of transcendent glory and virtue, while the present is low and depraved, and the only hope for the future is to turn back on the past. There is no progress for the Confucianist. Again Han-wên-kung opposed Buddhism because it was a barbarian invention and because it exalted religious ties above human relationships. So now the literati object to Christian converts that they leave the old manners of their native land for those of barbarians—that they part from their parents and friends and make mystic brotherhoods with aliens and strangers. The T'ang philosopher scouted the fables of Buddhism but believed in those of his own country; and the Confucianist who laughs at the tales and fables of Christianity believes all native absurdities and worships the airy phantoms with which he peoples the invisible world. All that is necessary to man for the conduct of life is contained in the ancient classics—receptacles of primeval wisdom—so taught Han-wên-kung and so still believe his representatives in the present. Piety at home is the first step in the way of virtue; this leads to the performance of social duties; and man's crowning perfection is to serve well and faithfully his family, society, and his country. To employ his talents in assisting the administration of government—to live by law and fear shame rather than death—to cull the topmost virtues of the past and rise superior to all the attractive vices of the present are the professed aims of all true followers of Confucius, and few have succeeded in these noble aims to so great an extent as Han-wên-kung.

ARTICLE VIII.

CHINESE LEGENDS.*

By G. C. STENT.

THE legends of all nations will generally be found to be linked to some prominent natural features, or enduring architectural monuments of the countries to which they respectively belong, and it is these legendary associations which give to them their intensest interest.

We, in the west, have, and are proud of having, our old castles, cathedrals, and ruins, not for their intrinsic value, their picturesque beauty, in many cases, or even their age, but from the historical or legendary associations connected with them. These throw an indescribable charm, at once awe-inspiring, mysterious and attractive over old buildings, far more effective than their antiquity. Who, in his boyhood, has not experienced the feeling of unnameable awe, that has taken possession of him when passing an old house that has had the reputation of being haunted; and yet at the same time felt the invincible attraction the house had for him? Again, what crowds assemble to look at a house that has been the scene of some crime; attracted to it, in spite of themselves, by a morbid curiosity, not simply to look at the house for its own sake, but on account of the crime committed there! Who would care to look at the "Tower of London" even, were it not that in old times it has been the scene of many bloody actions, that the very walls speak almost of the deeds done there? Every character engraved on them by the noble and the great, conveys to our minds whole histories of suffering, imprisonment and death, more telling than mere written histories. These are what attract us, and not the antiquity or beauty of the building, for to beauty it can lay no claim. Our glorious old castles and cathedrals were they divested of this attractive legendary charm, would, in spite of their grandeur and

* Read before the Society on June 12th, 1872.

hoary antiquity, be simply old castles and cathedrals,—nothing more; but when to their age or beauty is added the mysterious legends connected with them, they become in our eyes something sacred.

The "Well at Cawnpore" would probably never have been heard of; people of other lands would never have known of its existence, but for the fact that it bears within its bosom some of the victims of an atrocious massacre. *Now,* that well is a monument for future generations to visit with awe and reverence; it is rendered sacred by the history connected with it; it possesses the legendary charm, and ages hence, when the traveller approaches it, it will be with "uncovered head and bated breath," and the feeling that he is standing on holy ground.

This brings me to the subject of this paper: "Chinese Legends." Most foreigners think, that there is no such thing as romance amongst the Chinese, that they are too money-loving and matter-of-fact to allow of such a weakness. But on closer acquaintance they will be found to possess their full share of oriental imaginativeness, delighting in nothing more than in tales of the marvellous, whether true or not; so much so, that one of the commonest professions in China, is that of a 說書的 *shuo shu ti,* or teller of stories; and a looker on can see with what avidity an audience will listen to one of these street "story-tellers;" how they follow him through each phase of some exciting adventure, or thrilling legend; breathless to catch every word, and exhibiting such emotion at any affecting picture of suffering or distress, that one would scarcely imagine the same people could perhaps shortly after pass a similar scene of *real,* living distress and suffering with utter indifference. In fact, the realities that occur daily in China put one in mind of the dark ages of our own countries; there is constantly occurring some scene of blood, cruelty or suffering, that in western countries would soon be woven into volumes of "Romances of Real Life." For instances of this, one has only to take an occasional glance at the "Peking Gazettes;" and when one reflects on the number of cases daily occurring that are *not* officially reported, the idea is suggested "what a splendid field this must be for sensational novels! Here are materials for any number of such books!" Yet all these are lost to the public, simply for want of persons to put them together: could this be done, how greatly would our knowledge of China be enlarged! What an insight into this people's character and history we should possess!

There is scarcely a place in China but possesses *some* legend attached to it; indeed, the country abounds with them. I have often listened with pleasure, to the telling of some old legend, strange in every way to the ear of a foreigner. I propose relating two or three of these from memory, reproducing at least substantially what was told me.

The "Legend of the Bell Tower of Peking."

I beg the audience to bear in mind that "I tell the tale as 'twas told to me," and from memory only; I will not guarantee dates or names, or even vouch for the facts. My Chinese informant related it with evident gusto, and firmly believed it himself; and almost every Pekinese, amongst the lower orders especially, concurs in the same belief.

"Legend of the Bell Tower."

It was in the reign of "*Yung Lo*," the third monarch of the Ming Dynasty, that Peking first became the capital of China. Till that period the "Son of Heaven" had held his court at Nankin, and Peking had comparatively been of little note. Now, however, on being honoured by the "Sacred Presence," stately buildings arose in all directions, for the accommodation of the Emperor and his courtiers. Clever men from all parts of the empire were attracted to the capital, and, such as possessed talent were sure of lucrative employment. About this time the "Drum Tower" and the "Bell Tower" were built; both of them as "look-out" and "alarm" towers. The "Drum Tower" was furnished with a monster drum, which it still possesses, of such a size, that the thunder of its tones might be heard many "tens of *li*," in fact all over the city, the sound being almost enough to waken the dead.

The "Bell Tower" had been completed some time before attempts were made to cast a bell proportionate to the size of the building. At length *Yung Lo* ordered *Kuan Yu*, a mandarin of the second grade, who was skilled in casting guns, to cast a bell, the sound of which should be heard, on the least alarm, in every part of the city. *Kuan Yu* at once commenced the undertaking. He secured the services of a great number of experienced workmen, and collected immense quantities of material. Months passed in the preparation till at length it was announced to the Emperor that everything was ready for the ceremony of casting. A day

was appointed;—the Emperor, surrounded by a croud of courtiers, and preceded by the court musicians, went to witness it. Now came the exciting moment. At a given signal, and to the crash of music, the melted metal rushed from its confinement into the mould prepared for it. After the ceremony, the Emperor and his court retired, leaving *Kuan Yu* and his subordinates to await the cooling of the metal, which would tell of his failure or success. At length it was announced to be sufficiently cool to detach the mould from it. *Kuan Yu*, in breathless trepidation, hastened to inspect it, but to his mortification and grief, discovered it to be honey-combed in many places, which would render it utterly useless as a bell. The circumstance was reported to the Emperor, who was naturally vexed at the expenditure of so much time, labour and money, with so unsatisfactory a result. However, he ordered *Kuan Yu* to try again. He obeyed, and thinking the failure of the first attempt must have resulted from some oversight or omission on his part, he watched every portion of the proceedings with redoubled care and attention, fully determined that no neglect or remissness should mar the success of this second casting. After months of labour the mould was again prepared, and the metal poured, into it, but again with the same result. *Kuan Yu* was distracted, not only at the loss of his reputation, but at the certain loss of the Emperor's favour. *Yung Lo* when he heard of this *second* failure was very wroth, and at once ordered *Kuan Yu* into his presence, and told him he would give him a third and last trial, and if he did not succeed this time, he would behead him. *Kuan Yu* went home in a despairing state of mind, thinking what crime he, or any of his ancestors might have committed to have caused such a calamity to have befallen him.

Now *Kuan Yu* had an only daughter, about sixteen years of age, and having no sons, the whole of his love was centred in this girl, for he had hopes of perpetuating his name through her marriage with some deserving young nobleman. And truly she was worthy of being loved:—"almond-shaped eyes, like the autumn waves, which sparkling and dancing in the sun, seem to leap up in very joy and wantonness to kiss the fragrant reeds that grew upon the rivers' banks; yet of such limpid transparency, that one's form could be seen in their liquid depths as if reflected in a mirror. These were surrounded by long silken lashes,—now drooping in coy modesty, anon rising in youthful gaiety, and disclosing the laughing eyes but just before concealed beneath them. Eyebrows

like the willow leaf; cheeks of snowy whiteness, yet tinged with the gentlest colouring of the rose; teeth like pearls of the finest water, were seen peeping from between half open lips, so luscious and juicy that they resembled two cherries;—hair of the jettiest blackness and of the silkiest texture. Her form was such as poets love to describe and painters limn; there was grace and ease in every movement; she appeared to glide rather than walk, so light was she of foot. Add to her other charms that she was skilful in verse-making, excellent in embroidery, and unequalled in the execution of her household duties, and we have but a faint description of *Ko-ai*, the beautiful daughter of *Kuan Yu*."

Well might the father be proud of and love his beauteous child, —and she returned it with all the ardour of her affectionate nature; often cheering him with her innocent gaiety when he returned from his daily avocations wearied or vexed. Seeing him now return with despair depicted in his countenance, she tenderly enquired the cause, and not without hope of being the means of alleviating it. When her father told her of his failures, and of the Emperor's threat, she exclaimed, "Oh, my father, be comforted! Heaven will not always be thus unrelenting. Are we not told that 'out of evil cometh good;' these two failures will but enhance the glory of your eventual success, for success *this* time *must* crown your efforts. I am only a girl, and cannot assist you but with my prayers; these I will daily and hourly offer up for your success; and the prayers of a daughter for a loved parent *must* be heard." Somewhat soothed by the endearments of *Ko-ai*, he again devoted himself to his task with redoubled energy. *Ko-ai* in the meanwhile constantly praying for her father in his absence, and ministering to his wants when he returned. One day it struck her that she would go to a celebrated astrologer to ascertain the cause of these repeated failures, and what means could be taken to prevent a recurrence of them. From him she learned that the next casting would also be a failure if the blood of a maiden were not mixed with the ingredients. She returned home full of horror at this information, yet inwardly resolving to immolate herself rather than her father should fail. The day for the casting at length came, and *Ko-ai* requested her father to allow her to go to witness the ceremony and "to exult in his success" as she laughingly said. *Kuan Yu* gave his consent, and accompanied by several followers she went, taking up a position near the mould.

Everything was prepared as before:—an immense concourse

assembled to witness the third and final casting, which was to result in either honour, or degradation and death for *Kuan Yu*. A dead silence prevailed through the vast assemblage as the melted metal once more rushed to its destination; this was broken by a shriek, and a cry "for my father!" and *Ko-ai* was seen to throw herself headlong into the seething, hissing metal. One of her followers attempted to seize her while in the act of plunging into the boiling fluid, but succeeded only in *grasping one of her shoes, which came off in his hand.* The father was frantic, and had to be kept by force from following her example;—he was taken home a raving maniac. The prediction of the astrologer was verified, for, on uncovering the bell after it had cooled, it was found to be perfect, but not a vestige of *Ko-ai* was to be seen; the blood of a maiden had indeed been fused with the ingredients. After a time the bell was suspended by order of the Emperor, and expectation was at its height to hear it rung for the first time. The Emperor himself was present. The bell was struck, and far and near was heard the deep tone of its sonorous boom. This indeed was a triumph! Here was a bell surpassing in size and sound any other that had ever been cast! But,—and the surrounding multitudes were horror-struck as they listened,—the heavy boom of the bell was followed by a low wailing sound like the cry of a human female voice in dreadful agony, distinctly saying the word "*hsieh*" (shoe). To this day, the bell each time it is rung, after every boom appears to say the word "*hsieh,*" and people when they hear it, shudder and say, "*there's poor Ko-ai's voice calling for her shoe.*"

I am well aware that the "eminently practical man" of the "Bounderby" or "Gradgrind" species, would pooh, pooh, a tale like this, and proceed at once to prove by lines and angles that such a thing could not possibly occur; and could probably do so to his own satisfaction. But divest our own legends of their colouring, leave but the skeleton facts of many historical events which we now religiously believe in and venerate, and our belief would become indifference or scepticism, our veneration, disgust. There are times and places when too much "practical knowledge," greatly as we respect knowledge, in the abstract, becomes insufferable boredom, and we are surfeited with it; we do not wish our aerial castles to be rudely demolished by the practical hammer of "matter of fact." The most delightful reminiscences of our short lives are those connected with our childhood. These become grounded in our very nature, and even now, old as we are, prac-

tical as we may be, there must be times, when, wearied with our worldly pursuits, we live our childhood over again in our heart's most sacred memories, and reverently think of those

"Who taught us how to read and spell,
And would some pretty story tell."

We should not like the charm of those associations to be broken! We should not like to see our children miniature "practical men and women." We "are but children of a larger growth," certainly but children in everything that appertains to a knowledge of the Chinese; and as such, we should have some little amusement blended with our instruction, as the two lines just quoted imply. The study of Chinese might be made infinitely more attractive by the introduction of tales or legends, and as the student progressed in knowledge of the language, songs, novels, &c., no matter how absurd or trivial the subject may be, or even if they are not all "founded on fact." As I asserted some months ago before this Society, "more knowledge of the Chinese can be obtained from such sources than from any other." I have since been much gratified to find that my opinions have been indorsed practically by several gentlemen in Shanghai.

The next illustration I shall give—which I also received verbally from a Chinese in Peking—is called

"THE LEGEND OF THE CURSED TEMPLE."

The reign of 崇禎 *Ch'ung Chên* the last Monarch of the Ming dynasty was much troubled both by internal broils, and by wars; for while he was constantly attacked by the Tartar hordes from without, though generally beaten back by the celebrated general 吳三桂 *Wu San Kuei*, the country was perpetually in a state of anarchy and confusion, being over-run by bands of marauding rebels; indeed, so bold did they become, that they assembled under a chief named 李自成 *Li Tzŭ Ch'êng*, and actually marched on to the capital with the avowed intention of placing this rebel chief on the "Dragon Throne." *Ch'ung Chên* on the reception of this startling news,—with no one that he could trust to in an emergency like this,—(for *Wu San Kuei*, the only one he could have depended on was absent on an expedition against the Tartars), was at his wit's end. The insurgents were daily making nearer advances to Peking, in fact they were almost in sight of its walls, and at any moment might arrive. Rebellion seemed rife in the

city itself. If he went out boldly to attack the rebels himself, he was uncertain whether his own troops might not go over to them, or deliver him into their hands; if he stayed in the city, the people would naturally impute it to pusillanimity, and probably open the gates to the rebels.

In this strait, he resolved to go to the "*San Kuan Miao*," an imperial temple situated near the *Chao Yang Mên*, and entreat the gods as to what he should do under such dire circumstances, and decide his fate by "drawing the slip," fully determining to abide by the result of this fortune-telling process;—thus, if he drew a long slip, this would be a good omen, and imply unqualified success, and he would boldly march out to meet the rebels, confident of victory; if a middle length one, implying partial success only, he would remain quietly in the palace, and passively await whatever might happen; but, if he should unfortunately draw a short one, which would denote utter ruin, he would take his own life rather than suffer death at the hands of the rebels. Firmly resolved on these several points, he proceeded to the temple, accompanied by the high officers of his court. In the presence of them all the sacrifices were offered up, and the incense burnt, previous to drawing the slip on which hung the destiny of an empire, while he himself remained on his knees in prayer. At the conclusion of the sacrificial ceremony the tube containing the bamboo fortune-telling sticks was placed in his hand by one of the priests. His courtiers and the attendant priests stood around in breathless suspense, watching him as he swayed the tube to and fro; at length one falls to the ground; there is a dead silence as it is raised by a priest and handed to the Emperor. *It is a short one!* Dismay falls on every one present, no one daring to break the painful, horrible silence. After a pause, the Emperor with a cry of mingled rage and despair dashed the slip on the ground, exclaiming, "May this temple built by my ancestors evermore be accursed! Henceforward may every suppliant be denied what he entreats, as *I* have been! Those that come in sorrow, may that sorrow be doubled; in happiness, may that happiness be changed to misery; in hope, may they meet despair; in health, sicknes; in the pride of life and strength, death! I, "*Ch'ung Chên*," the last of the Mings, curse it!"

Without another word he retired, followed by his courtiers,—proceeded at once to the palace, and went straight to the apartments of the Empress. The next morning he and his Empress

were found suspended from a tree on "Prospect Hill." "In their death they were not divided." The scenes that followed; how the rebels took possession of the city and were driven out again by the Chinese general, assisted by the Tartars; how the Tartars finally succeeded in establishing the present dynasty are all matters of history. The words used by the Emperor at the temple were prophetic,—he *was* the last of the Mings. The tree, on which the monarch of a mighty empire closed his career, and brought the Ming dynasty to an end, was ordered to be surrounded with chains; it still exists, and is *still* in chains. Upwards of two hundred years have passed since that time, yet the temple is standing as of old, but the halls that at one time were crowded with worshippers, are now silent, no one ever venturing to worship there; it is the resort of the fox and the bat, and people at night pass it shudderingly.—

"It is the cursed temple!"

I shall make no remarks on the above beyond stating that I have often seen the temple, and know it to be as I have described; as for the remainder, where history breaks off and fiction commences, I leave it to others.

The next illustration I shall give is of a more recent date. Some years ago, when walking near the race-course at Tientsin, I called the attention of a Chinese friend who was with me, to the neatness of a plot of ground used as a family burial place. "Ah!" he exclaimed, "that is the burial ground of the *Chang* family; it did not originally belong to them, and came into their hands through a rather singular circumstance, being no other than that one of their members *'stole a burial'* there." Curious to know how a person could possibly "steal a burial," I begged him to relate the particulars to me, which he did as near as I can remember, in the following words.

"The Stolen Burial."

Some sixty or seventy years ago, one of the ancestors of the *Chang* family died here at Tientsin, leaving his widow, and an only son, a youth about nineteen, the hero of this tale, in very comfortable circumstances. Possessed of competence, youth, the advantages of a liberal education, and good natural qualities, he might have been a comfort and a solace to his mother, but, alas! his good nature and yielding disposition, caused him to be easily

led astray, and, freed from the restraining hand of a father, he plunged with avidity into all the gaieties of the place, and was at length tempted by some of his profligate companions into play. By degrees he became so infatuated with this pursuit, that, in spite of the repeated warnings of his mother, who with tears entreated him to leave off this pernicious habit, he went from bad to worse, till he had squandered the whole of his patrimony. For some time he was enabled to continue this all-absorbing passion for play, by loans from his relatives; this could not last long, for, when they understood to what a state he had brought himself by his recklessness, they, with reproaches to him for his depravity, and undutifulness to his mother, drove him from their doors.

Now, indeed, he began to feel poverty. Day by day, some article of furniture or clothing had to be disposed of to supply the common necessaries of life; but whenever he could scrape together a few cash, he hurried on the final catastrophe, by rushing with it to the gambling house, till finally, he was left with not one solitary article but an old worthless mat, on which lay the body of his dead mother. Dead, through want and sorrow brought on solely by his worthlessness. Frantic with remorse, he went to the different members of his family, begging of them to supply him with funds so that he could at least bury his mother respectably. Amongst them he collected twelve taels, for they were too cautious to advance any very large amount. With this sum in his possession he proceeded homewards; on the way he thought, "In all my gambling transactions I have hitherto lost; I am reduced to beggary, and I have destroyed my mother by it. Why should I not stake this money? Why should not the very *cause* of her death be made the means of enabling me to insure her a funeral worthy of her former station? I *must* win! Heaven will not let me lose, when it is for so good a purpose! I will risk it!" He *did* risk it,—and—*lost!*

Now, what was he to do? Hungry, penniless, with a dead mother, and having just thrown away the means of decently interring her! He sat down by the corpse and bitterly reproached himself. At length he thought, "I must bury my mother at any sacrifice, or I shall be looked upon as an unnatural monster; if I cannot do it otherwise, I will "steal a burial!" (This is often done by poor people who have not the means of purchasing the ground; and if they can only succeed in burying the corpse, the owners of the ground, however much they may deprecate the

circumstance, dare not remove the body). The young man then carefully folded the body of his mother in the old mat,—borrowed a spade from a neighbour, and taking the corpse on his shoulder proceeded to the cemetery. When he arrived there, he placed the body on the ground, and by the light of the moon, selected what he thought a suitable place for the interment, being one raised above the general level. He hastily set to work to dig the grave, trembling meanwhile with fear at the ghastly nature of his employment, and filled with dread lest he should be interrupted in it. When he had completed the grave, he reverently placed the corpse of his mother in it, covered it in, made a neat mound of earth over it, and after a few muttered prayers, hurried to the four bare walls that had once been his home.

The next morning, after pointing out the place to one of his relatives, and leaving him to imagine his mother had been lawfully buried there by the assistance of the twelve taels he had received, he turned his back on his native place. With no fixed intention, so long as he was only going *from* the scene of his disgrace, he wandered southward, subsisting on the way by begging, till he came to Tê-chou, where were docks for the building of junks, and a government timber yard. Here he obtained employment as a labourer; giving general satisfaction by his industry, and liked by his fellows for his pleasant and obliging disposition, but still with the passion for play strong as ever; occasionally stealing and selling wood from the yard to replace his losses. One night, he was stealthily proceeding to a place where he had deposited some wood for the purpose of disposing of it in this way, when he suddenly encountered the official in charge of the works, who asked him what he was doing there at that hour. *Chang* replied, "I thought I heard some one in the yard, and fearing it might be thieves, I came out to see." The mandarin, attracted by his appearance and manner, and pleased to see such apparent care in a labourer, appointed him at once as one of the overseers. From this time he gradually broke off his gambling habits, and sedulously devoting himself to his duties, daily grew in favour both with his employer, and those over whom he was appointed.

A year or two after this, the province was infested by bands of rebels, and the government employés were enrolled as volunteers, and went out with the regular troops against them; *Chang* holding a small rank amongst the mounted volunteers. One day, the army had halted for rest and refreshment, and *Chang* and some

of his companions were just sitting down to a hot dinner, when the alarm was given that the rebels were approaching. In a moment, everything was confusion and uproar; horses being saddled, men rushing for their weapons, and shouting in all directions. *Chang* knowing by experience that good dinners were not always readily to be procured in these times, hastily strapped the vessel containing his portion of the hot mess on the croup of the horse, and at once mounted. The remainder quickly got together, and advanced in the direction of the rebels, blowing horns and beating gongs. The rebels were seen at some distance, brandishing their weapons, when suddenly the horse ridden by *Chang*, feeling something unusually hot trickling down his croup, the lid of the pannikin having partially opened, dashed to the front, and galloped towards them furiously, in spite of all *Chang's* efforts to prevent it. Seeing nothing but death before him, he determined to make the best of it, and sell his life as dearly as possible; so he drew his sword, and frantically waving it over his head, commenced shouting with all his might. His own party seeing him so boldly, as they thought, charging the enemy alone, hastily followed. The rebels at once turned and fled, with *Chang*, though much against his will, by this time in the midst of them, cutting and slashing at random in his desperation; which was imputed both by the rebels and his own party to reckless bravery. The rebels were utterly routed.

The general after the affair was over, enquired who the individual was who had displayed so much gallantry, exclaiming, "Where is that noble hero, who alone and unaided rushed into the thickest of the enemy, scattering death and destruction wherever he went? Bring him to me, that I may reward him as he deserves!" *Chang* was led into the presence of the general, highly complimented on his bravery, and made a "blue-button" on the spot. He received the praises and honour bestowed on him with great modesty, naturally suppressing the fact that he owed the credit of bravery to his hot dinner and the fright of his horse. From this moment, his fortune was made. The general in writing an account of the affair to Peking, described his valour in glowing terms,—giving him the entire credit of the victory. The Emperor confirmed the honour conferred on him. His reputation for bravery spread far and wide, and he was constantly being sent on different expeditions; the *prestige* attached to his name doing much to assist in the many victories he afterwards obtained.

Success seemed to follow him everywhere, and he rapidly rose to the highest rank. In the mean time he did not forget the circumstances attending the "Stolen Burial," but caused the plot of ground to be bought that contained the body of his mother. He also married and had numerous children. At his death a temple was ordered to be built and dedicated to his memory; it stands now as a monument to his bravery; and his descendants at this time are amongst the most influential in Tientsin; but while they take pride in relating the glorious deeds of their ancestor, they invariably omit the *entire* particulars of his "first charge," and the history of "The Stolen Burial."

ARTICLE IX.

THE ANTIQUITIES OF CAMBODIA.*

By J. THOMPSON, F.R.G.S.

CAMBODIA as we find it at present is a small kingdom of eastern Asia through which the Mekong river flows, periodically flooding and fertilising the land, as the Nile does Egypt. It is confined on the north by Laos, and a number of petty, half-savage States. On the east and south-east by Cochin China. On the west by Siam, falling in the south into the gulf of Siam, where a growing trade is carried on by Chinese settlers at the port of Camput. It is only within the last ten years, through the intervention of France that the country regained its independence, and is now under the joint protection of France and Siam. This brief outline will convey some idea of the present geographical limits of the country. The chief object of this paper is to attempt to throw some light on the early history of Cambodia, or at least to creat an interest in its ruined cities, of which one of our best authorities on eastern architecture says. †"Since the exhumation of the buried cities of Assyria by Mons. Botta and Mr. Layard nothing has occurred so startling or which has thrown so much light on eastern art as the discovery of the ruined cities of Cambodia." Although something has been done by the few foreigners who have explored those ruined cities, much remains yet to be done by extended scientific exploration and by a translation of the inscriptions which are found in different parts of the ruins, and which probably contain the only history this building race left behind them. It would be interesting to know something definite regarding a people who have left us such monuments of their art, civilisation and vast resources. It would appear from the notices in the Chinese histories that the Cambodians at an early period were a warlike race,

* Read before the Society on January 11th, 1872.

† Fergusson's History of Architecture. Vol. II, p. 71 et seq.

and that they annexed many surrounding kingdoms. They were then noted for their commerce, their great wealth, and their arts. It would seem that they had become effeminate at a later time. Rejoicing in their wealth and luxury, they had forgotten, or neglected the art of war, and had been swept from the land by some rude, but hardy invader who had done his worst to wipe out the memory of the conquered race, whose great buildings, though battered and disfigured by the rude implements of war, defied him to unbuild them. Many of these buildings are still in good preservation although they have been neglected and deserted for centuries, until the forest has grown up around them and stately trees have grown from their roofs and walls, and the halls of Princes have become the haunts of wild animals. It would be difficult to recognise in the present inhabitants of the country the descendants of the ancient Cambodians—difficult to concieve how it is possible that a people who knew better than any other race of eastern Asia how to construct stone buildings on the most enduring principles, and with an elegance of design approaching to the classic examples of Greece or Rome, could have so utterly lost all knowledge of their early arts as to be unable to construct anything more enduring than their huts of bamboo and palmleaves as we find them in their scattered settlements in the forests of Cambodia at the present day.

The ancient stone buildings of Cambodia are found far beyond the present limits of the country. They have been found in Korat, the northern extremity of Siam, high up on the banks of the Mekong river, and south beyond the great lake Tale Sap. Nakon Thom, the ancient capital, is situated in the province of Siam-rap, fifteen miles north of the lake. This province appears in ancient times to have been the centre of the Empire, as it contains the principal buildings. Nakon Wat, the temple of the capital, is five miles north of the city. It is the finest, and evidently the most recent work of the ancient Cambodians, as there are some parts of the building unfinished,—some parts of the ornament where the sculptor seems to have been arrested at his work, where one sees the rough mark of the chisel on some graceful scroll which he never returned to finish. There is one pavilion within the enclosure of Nakon Wat which reveals the ancient mode of building. There are a number of unfinished pillars in the interior which are perfectly fitted to the blocks of stone of the roof and flooring, whilst the shafts are rough and shapeless, excepting in one place where

I found a pillar half finished. The capital had been cut, and the shaft half hewn down to its proper form when the work had to be abandoned. There are other and older examples in the city which show that the buildings were first erected, and afterwards ornamented by the sculptor.

A brief description of Nakon Wat will convey some idea of the magnificent scale on which the Cambodians constructed their buildings. Following the narrow path through the forest, passing over blocks of sculptured stones, we at length ascended four broad flights of steps leading to an elevated stone platform, and guarded on either side by a colossal stone lion sculptured out of a monolith. The terrace had the form of a cross, having three similar approaches with its main stem stretching away eastward towards the temple, and crossing a moat 230 yards wide which surrounds the outer building. I can hardly conceive of anything more startling than the first sight of this great temple, after a month's journey through the forests and jungles of Siam. Ascending the cruciform terrace we had the building in full view, more imposing in its proportions than the great pyramid, rising in a series of sculptured galleries and terminating in a group of central towers. A few solitary birds winged their flight from the terrace as we passed along towards the western gate. We halted for a moment to admire the solid masonry of the stone walls that retain the moat,* puzzled to imagine by what mechanical appliances the huge blocks were transported and adjusted in position.

The moat encloses a square space measuring over three fourths of a mile on each side. Within there is a wall built in the finished style that characterises the structure throughout. At each of the four angles there is a tower, and pavilion, and in the centre of each side of the wall there are long open galleries having screens of classic looking square pillars. In these galleries there are gateways conducting by inner stone causeways to the temple. Passing through the western gate which is guarded by two seven-headed snakes, sculptured in stone, we traversed the inner causeway, and ascending an elevated and highly ornamented cruciform terrace entered the porch of Nakon Wat. Of the actual appearance of this temple, the classic proportions of its pillars, and beauty of its

* The stones must have been brought a distance of 60 miles over the plain, from the Lychie mountains, where we found abundance of freestone and traces of ancient quoins.

ornament, some notion may be formed by an inspection of the photographs, although even with their aid one must still form but an imperfect impression of the extent and design of the building. To photograph the bas-reliefs in the lower galleries alone would have occupied me six months at least. One of the constantly recurring ornaments of these buildings is a seven-headed snake similar to those seen above the ancient arch at the village of Kew-yung-kwan in the Nankow pass. Mr. Fergusson considers that the hydra-headed snake affords evidence that the ancient Cambodians who built the temple were snake worshippers. The general opinion of authorities in China is opposed to this view, and for this reason:—Had the temples been built for snake worship the snake god would have had the place of honour in the innermost shrine, in place of holding the subordinate position of guardian at the temple gate. *"In China the Buddhists place the popular Hindoo divinities in a very humble position. They are made to act as keepers of the door to Buddha and his disciples." †A Chinese Ambassador who was sent on a mission to Cambodia in the year 1295—the year in which Marco Polo left for Europe—found it stated in one of the common traditions of the country that in ancient times the great prophetess of Chinla had taken the form of a nine-headed serpent and dwelt in the golden tower of the palace, showing that if at an early period the serpent had been an object of worship, it at that time only existed in the traditions of the people, and as an ornament to their temples, occupying a similar position to that of the Hindoo divinities in the Buddhist temples of China.

My visit to Cambodia in the year 1866 was productive of nothing beyond a series of photographs of its antiquities; a ground plan of Nakon Wat; and a malignant attack of jungle fever brought on by exposure to the excessive heat and miasma of the forests. Among the fanciful traditions narrated to me by the natives of the country regarding the mysterious creation of the great building, one in which they appeared to have great faith states that the walled cities and stone edifices were built by a race of giants, who first moulded them in clay, afterwards pouring over them some subtle fluid which transformed them into stone. It is a common belief among the natives whom I frequently found burrowing in

* The Religious Condition of the Chinese. Edkins, p. 11.

† "Chinla Tung-too-ke" by Chow Ta Kwan.

the mounds within the city, that vast stores of treasure were concealed among the ruins. One of the natives, with something of the ancient business spirit of the nation, sold me a piece of pottery which he professed to have dug from a mound in the city, but I afterwards discovered that the curio was a Chinese importation bought at the nearest village.

Regarding the true history of the race some information might be gathered from the ancient inscriptions which are cut on many of the buildings. I succeeded in taking rubbings of them, but failed both in Siam and England in obtaining translations, as the characters are quite unknown. Some days ago Mr. Wylie showed me a Chinese vocabulary of the Papih language. I believe I recognise in the Papih the same characters as those of the Cambodian inscriptions. The people who used that language were the Laos of Chengmai which at one time formed part of Cambodia.* As late as the year 1644 the Papih was taught at the Hanlin college of Peking. Unfortunately I cannot at present compare the Papih with the ancient Cambodian, as the rubbings I obtained, are in England. I am indebted to the Rev. Mr. Edkins and Mr. Wylie for translations from the histories of the early Chinese dynasties of reliable accounts of ancient Cambodia. I afterwards found that a number of these had been published by A. Remusat in 1829.†

The Chinese appear to have had no knowledge of that part of Asia occupied by Cambodia and Cochin China before the year 140 B.C. It is noticed in the "Teen-hia-kwo-le-ping-shoo" by Kwo Ting-lin. When Linquan was first known Cochin China went under the name of the Seang region, which probably included Cambodia, as there is no separate mention made of it. About 56 and 57 B.C. Cochin China was under Chinese rule, two governors were appointed who taught the natives agriculture and how to make caps and shoes, and contract marriages, showing that the people of Cochin China were at that time in a savage state, probably living much in the condition of the present mountain tribes of Formosa, where the women select their partners and divorce them at pleasure. What follows is a very early notice of women asserting their rights. Whether it was that they objected to be interfered with in their social relations by the introduction of the

* Memoirs concernant les Chinois. Vol. 14, p. 5.

† Nouveaux Melanges Asiatiques.

novelty of marriage amongst them; that they preferred their old system of natural selection to the complicated ceremony of the Chinese; or that the Amazon insurrection was raised on purely political grounds, is not recorded. It is simply stated that two women named Ching Tsih and Ching Urh raised a rebellion which was quelled by Ma Yuen. Sometime between A.D. 196 and 220 the name of the Seang region was changed to Keanon Chow and remained unaltered during the former five dynasties which terminated about the year A.D. 618.

It is mentioned in the history of the Tsin dynasty, A.D. 265 to 419, that the people of Foonan (which afterwards became part of Cambodia) were noted for agriculture, and for freedom from robbery. Sculpture is also referred to as an art in which they excelled. They had at that time books, writing and treasuries. It is stated in another account that the King of Foonan was Gotama, a Brahmin and native of India. The mode by which he obtained the throne was as follows. He stated that a spirit appeared to him telling him that he ought to be King of Foonan. Coming to the country of Banban the people of Foonan sent messengers to meet him, and to crown him King. From this time the national institutions were altered and conformed to those of India. *According to the Siamese Annals, this would be about the time when Buddhism was introduced into Cambodia. As there were no great buildings in India before the Buddhist era, it is probable that none of the Cambodian buildings were erected before the middle of the fifth century, the time when Buddhism is said to have been brought to the country.

In the book first quoted it is said that Chinla had also the name Kampoge. It was also known as Kimei (it is still called Kimer or Kimeia by the natives). It originally belonged to Foonan. It first sent ambassadors to China during the Sin dynasty, A.D. 616. At an early period Foonan was governed by a Queen who married a man from the Keaon country who succeeded in partially civilizing the people, having taught them to wear clothing. He was followed by a Hindoo priest who taught the people Divine worship.

About A.D. 650 Chinla annexed many surrounding kingdoms. It was afterwards divided into the Land Chinla and the Water

* Buddhism introduced into Cambodia A.D. 422. "Travels in Indo-China Cambodia et Laos." Mouhot, Vol. I, p. 66.

Chinla. It was again reunited when it conquered and exterminated Tsiampa. The capital city of Chinla, or Cambodia, was at that time 20 li in circumference.* If the ancient *li* was the same as that in modern use this measurement would not agree with that of the ruined city of Nakon Thom,† which is reported to have been the ancient capital; otherwise the discription given by the Chinese eye witness corresponds in most respects with the city as I found it in 1866. Its great stone wall, moat and bridge, the stone tower above the gateway, ornamented with colossal heads of Buddha sculptured in stone, and the stone tank which he describes in the heart of the city are so accurately noted as to leave little doubt that Nakon Thom was the city visited by the author when the country was in a flourishing condition. The city had 20,000 houses. There were thirty other cities each having several thousand houses. Some interesting details are given regarding the manners and customs of the people. They bound up their hair into a knot on the top of the head. They were of an active and robust temperament. They practiced cremation just as in Siam at present, burning the bodies of the dead on a pile of aromatic wood, the poor who were unable to procure fuel for the ceremony casting out their dead to be devoured by savage beasts in the obscure retreats of the mountains.

It is said that when a new King ascended the throne, his brothers were mutilated, one having his finger cut off, another his nose &c. This was instituted to disqualify them for holding office, and thus to prevent corruption by having men placed in office who could advance no better claim than their being related to the King. It is also noticed that in one of the great temples, guarded by a thousand soldiers, they had periodical sacrifices of human beings. About this time the King of Cambodia was a Kshatriya, a Hindoo of the military caste. Under the wise rule of his ancestors the country had gained strength having brought many Kingdoms into subjection. These extracts point to the period of the Hindoo Kings as being that in which Cambodia enjoyed its greatest prosperity. They also account for the Hindoo element in the sculptures of the ancient buildings. They do not show however, how the Cambodians obtained the original ideas embodied in the designs of their buildings; neither do they account for the

* See History of the Seu Dynasty.

† It is 20 miles in circuit.

knowledge of European art shown in their finely formed square pillars which are to be found in no part of India, and which resemble so closely in proportion pillars of the Roman Doric order. In one of the native traditions the presence is mentioned of white men in the country at an early period, together with the name of Rome. It is not impossible that some knowledge of Roman, or Greek, art may have found its way into Cambodia before the 5th century. In the history of the second Han dynasty two Ambassadors are reported to have visited China, one in the year 166 A.D. and the other about a century later, in 265. This is however a question which I cannot venture upon, though it is one which is well worthy of investigation. Taken in connection with the antiquities of Cambodia it affords a rich field for research. The great trade of the ancient Cambodians is noticed by the Chinese writers, and the princely manner in which the merchants lived, and of their employing ships with sails, the great wealth of the country, the golden tower of the Kings' palace, the golden bridge, and of the people it is even admitted by the Chinese Ambassador of the thirteenth century that they were comparatively civilised.

ARTICLE X.

QUELQUES RENSEIGNEMENTS SUR L'HISTOIRE NATURELLE DE LA CHINE SEPTENTRIONALE ET OCCIDENTALE.

PAR LE R. PÈRE ARMAND DAVID,
Missionaire Lazariste.

Lettre à M. —— *à Shanghaï.*

PÉKIN, 12 *Août*, 1872.

MONSIEUR,

J'AI laissé passer bien longtemps depuis que je vous ai promis de vous donner quelques renseignements sur l'histoire naturelle du nord et de l'ouest de la Chine. Mon respectable confrère et votre ami, M. Aymeri, dans chacune de ses lettres ne cesse de me rappeler cette promesse que je différais toujours de remplir soit à cause d'occupations plus pressantes, soit parceque j'aurais voulu en attendant recevoir d'Europe les exemplaires de plusieurs petites publications qui y ont été faites sur mes recherches et sur mes voyages malheureusement, je n'ai rien eu jusqu'aujourd'hui; et je regrette surtout de me trouver privé de mes volumineuses notes concernant mon dernier voyage au Setchuan et au Thibet oriental, que j'ai laissées en France.

Néanmoins, comme je me prépare à repartir prochainement pour l'intérieur de l'Empire, je me fais auparavant un devoir de réunir ici quelques souvenirs. Et vous, Monsieur, qui aimez les sciences naturelles, vous trouverez peut-être intérêt à vérifier si ce que j'écris aujourd'hui, à la hâte et d'après mes observations personnelles, amplifie, confirme, ou contredit les connaissances que vous avez sur les productions de l'Extrême-Orient.

Je vous dirai d'abord que, arrivé en Chine en 1862, j'ai séjourné pendant plusieurs années à Pékin; ce qui m'a fourni l'occasion d'acquérir une certaine connaissance de la Faune et de la Flore de la grande province du *Tchély*. Ensuite, je suis allé passer six

mois dans la Mongolie orientale, près de *Jéhol;* et de plus, environ un an dans les pays du *Toumet,* des *Ortos,* de l'*Ourato,* et de *Mao-mingan,* en faisant dans toutes ces régions des collections de Zoologie, de Botanique et de Géologie: je les ai envoyées, pour la plupart, en Europe. Plus tard, j'ai consacré deux ans entiers à l'exploration du *Kiangsi,* du *Setchuan* et des principautés des *Man-ze;* et c'est à la suite de cette longue et fatigante excursion que je suis allé en France, pour y rétablir ma santé.

Après ces préambules, entamons enfin notre matière.

1° Géologie.

Après les travaux spéciaux de MM. Pumpelly et Von Richtofen, il est superflu de m'étendre sur ce sujet. Mais, comme il m'a été donné de pouvoir m'avancer en Mongolie plus à l'ouest que le premier de ces géologues, et au Setchuan plus que le second, je dirai brièvement, à propos des charbons minéraux, qu'il se trouve dans ces régions plusieurs dépôts de houille, dont ces voyageurs n'ont pas pu personnellement vérifier l'existence. Je dois citer en particulier l'excellente houille bitumineuse, très-pure de pyrites, qu'on exploite au milieu des monts Ourato, non loin de la petite ville de *Sartchy* et du *Hoangho* dans la localité nommée *Shekouen* et *Méy-yao.*

Au Setchuan, comme on sait, on extrait le charbon d'un grand nombre de points; mais les meilleures houilles se rencontrent seulement vers la méridienne de *Tchentou,* soit au nord, soit au sud de cette grande, belle et industrieuse ville. On exploite aussi quelques mines peu importantes dans les montagnes qui sont plus à l'ouest; mais je n'ai point entendu parler de houille dans les pays des peuples *Man-ze,* où les forêts fournissent un combustible plus commode.

Ici peut-être, Monsieur, vous me demanderez sans aller plus loin, quel est ce pays des *Man-ze,* dont j'ai parlé et je parlerai plusieurs fois, et dont fait partie la principauté de *Moupin* qui m'a fourni mes principales nouveautés zoologiques et botaniques?

Si du coin où se touchent les trois provinces du *Shensi,* du *Kansou* et du *Setchuan,* vous tirez, sur une carte, une ligne un peu courbe qui passe à l'ouest de *Longanfou* et de *Tchentou,* (à une petite distance), et s'avance au sud jusqu'à *Souy-fou* et à l'angle septentrional du *Yunnan,* vous trouverez là une série de rivières et de montagnes qui forment la véritable frontière naturelle

de l'ouest du Setchuan Chinois, quoique les cartes étendent cette province bien plus loin. Passé cette ligne à peu près longitudinale, vous avez une région toute différente de celle qu'on connait en deçà. Là abondent les grandes montagnes entrecoupées par de profondes vallées où coulent des rivières torrentielles, et qui sont encore souvent boisées sur leurs flancs. C'est parmi elles qu'ont abrité leur indépendance les Aborigènes, plus ou moins barbares, que leurs voisins du Céleste-Empire gratifient des noms de *Man-ze* et de *Si-fan*. Ils occupent tout ce pays compris entre la Chine proprement dite et le Thibet, depuis le grand coude méridional du *Yangtzekiang* jusqu'au *Kokonor*, et ils ne permettent aux Chinois de pénétrer que dans quelques-unes de leurs principautés les plus rapprochées, comme dans celle de *Moupin* où j'ai demeuré neuf mois.

C'est le régime féodal qui est en vigueur parmi ces montagnards; ils sont partagés, me dit-on, en plus de quatre-vingts petits états. Le Boudhisme des lamas est la religion professée par la plupart d'entr'eux. Leurs langues, plus thibétaines que chinoises, diffèrent considèrablement d'un état à l'autre, et offriront aux linguistes un sujet très-intéressant d'études.

Les *Man-ze* que j'ai vus sont assez bien faits et robustes. Ils ne portent pas la queue à la chinoise, et ils s'habillent en grossiers tissus de laine qu'ils fabriquent eux-mêmes. Les hommes ont une chemise à collet, et les femmes des robes coupées à la ceinture; deux formes, inconnues en Chine, qui rappellent les modes européennes. Les maisons, bâties en pierres, ont aussi d'ordinaire un ou deux étages au-dessus du rez-de-chaussée; celui-ci est toujours occupé par le bétail, qui forme leur principale ressource.

Les animaux que les *Man-ze* nourrissent sont: le *cheval*, le *yak* à cornes et celui sans cornes, deux variétés de *vaches* (dont l'une donne beaucoup de lait), le *mouton*, dont les longues cornes s'étendent en spires horizontales; et la *chèvre*, dont une variété porte quatre cornes. Je n'ai jamais vu d'âne dans ce pays; et le porc, le chien, le chat et la poule qu'on y élève, ne diffèrent point de ceux qu'on trouve dans le reste de la Chine. Les céréales cultivées consistent en froment, maïs et sarrazin, selon les districts. Les idées de métempsycose que les Boudhistes professent n'ont pas assez d'éfficacité pour les empêcher de tuer les animaux, et le gros gibier qui abonde dans leurs bois.

Les cartes chinoises indiquent tout autour des frontières occidentales du Setchuan les plus hautes montagnes de leur Empire:

on les désigne du nom générique du *Sué-shan* (montagne neigeuse); mais personne jusqu'aujourd'hui n'avait été à même de vérifier la hauteur de ces pics. A *Moupin*, j'ai gravi moi-même, le baromètre à la main, le point le plus culminant de la Principauté, qui a environ quinze mille pieds d'altitude, et de là, j'ai aperçu, au nord et au sud-ouest, de grands massifs montueux dont les sommets principaux peuvent se comparer aux hauteurs himalayennes.

Le calcaire dévonien, des grès et de puissants conglomérats se rapportant sans doute à la formation carbonifère, des porphyres verdâtres, des masses amphibolitiques et granitiques, des schistes chloriteux et des phyllades siluriennes, alternent et s'entrecoupent dans ces âpres montagnes, qui paraissent désordonnément entassées les unes sur les autres. J'ai trouvé, à douze et quinze mille pieds, des crêtes aigües composées de schistes très-friables.

Mais ce qu'il y a de surprenant, c'est que à cette élévation, dans la principale montagne de *Moupin (Hong-shan-tin)*, il n'y a point de neige en hiver, (parceque les nuages se déchargent plus bas, dans la région des forêts); tandisqu'il y neige, souvent en plein été. Comme il est facile de le deviner, le climat de ces régions élevées est rude et désagréable; l'hiver est long, et pendant toute l'année il y a des pluies et des brouillards très-fréquents.

En fait des mines métalliques exploitées dans ce centre-ouest de la Chine, je dirai que, outre l'or qu'on recueille dans les sables de presque toutes les rivières dans la saison des basses eaux c'est-à-dire en hiver, j'ai vu qu'on a utilisé à Moupin le cuivre sulfuré et carbonaté; et, un peu plus au nord, une galène dont on obtient du plomb et de l'argent. Les meilleurs minerais de fer abondent surtout dans l'arrondissement de *Longanfou*, sur les limites des pays des *Si-fan*. On m'a montré aussi des spécimens de minerai de cuivre et de mercure, provenant des montagnes qui longent, au sud, le Fleuve-Bleu.

En deça des grandes montagnes des *Man-ze*, la majeure partie du Setchuan consiste en collines d'égale hauteur, traversées çà-et-là, par de petites chaines où les strates soulevées montrent souvent à nu les roches carbonifères. Les couches de ces collines conservent leur position primitive horizontale; ce sont les seuls agents atmosphériques qui ont creusé les innombrables vallées d'érosion. Il est donc évident que le *statu quo* de cette partie de la Chine remonte à une haute antiquité. On sait que c'est en perçant patiemment ces strates de grès jaunâtre ou rougeâtre, que les Chinois obtiennent de l'eau salée, du pétrole, ou du gaz; et cela, un peu par toute la province.

Je ne veux pas laisser l'article Géologie ou Géographie, sans dire un mot sur cette terre meuble jaunâtre qui recouvre le nord-ouest de la Chine et une partie de la Mongolie. Cette formation intrigue beaucoup les géologues, dont quelques-uns voient en elle le *Diluvium* jaune ou *loess*, et d'autres le résultat d'un lent travail chimique et même organique. Il est de fait que, en Chine et en Mongolie, les épaisses masses de cette terre s'observent bien plus haut que le *loess* en Europe, et jusqu'à l'altitude de six mille pieds! C'est encore un fait que les fossiles des mammifères quaternaires s'y rencontrent un peu partout; et moi-même j'y ai ramassé plusieurs fois, tant en Chine qu'en Mongolie des restes de l'*Elephas primogenius*, du *Rhinoceros thicorhinus*, de l'*Equus caballus*, du *Bos primogenius*, et de deux ou trois cerfs inconnus. Mais jamais je n'ai eu la chance d'y trouver de coquilles et d'autres productions aquatiques. Il est vrai que les preuves négatives ne suffisent pas pour conclure; mais ici, l'ensemble des faits parait être contraire à la supposition d'une formation aqueuse.

Je fais pourtant une exception pour le bassin du *Hoang-ho* supérieur et voisinages. Les Européens qui font le voyage de Pékin à *Kouy-hoa-tching* sont frappés, même sans être naturalistes, du grand développement des *roches pyrogènes* qu'on aperçoit sur toute la route. L'éruption de ces basaltes suppose de grandes révolutions terrestres; et l'on peut facilement penser que dans les temps anciens le cours du Fleuve-jaune et celui d'autres rivières ont été obstrués et changés plusieurs fois. Alors leurs eaux ont dû se répandre et former des séries de grands lacs, jusque dans les hautes plaines de la Mongolie. Ces masses liquides n'auront cessé d'exister que quand le limon du fleuve aura comblé les concavités, ou que les eaux se seront ouvert un passage au travers des montagnes anciennes et nouvelles. Il y a énormément de probabilité que les choses se sont passées de la sorte (au moins dans le nord-ouest de la Chine et dans la voisine Mongolie) à l'époque où les *mammouths* et les rhinocéros foisonnaient dans l'Asie centrale.

D'un autre côté, le *Diluvium*, ou *loess*, n'est jamais stratifié; les coquilles fossiles, comme je l'ai dit, y manquent; et la formation ou l'accumulation de ce terrain semble se continuer encore et se rallier aux causes actuelles. Pour moi, je crois que, dans tous les cas, on ne doit pas omettre de ranger dans le nombre des causes productrices de certains depôts de notre *loess*, les grands vents qui règnent en Mongolie pendant les deux tiers de l'année: la terre des hauts plateaux n'y est protégée que par une rare et maigre

végétation. Les geologues doivent donc se bien garder de ne point confondre les formations récentes avec les anciens dépôts.

Je note ici que, dans la partie supérieure du *loess* de Mongolie, j'ai obtenu plusieurs *silex* travaillés en couteaux et en pointes de flèches; mais, rien n'autorise à faire croire que ces objets remontent jusqu'aux temps prehistoriques, quoique les habitants du lieu n'en sachent rien dire maintenant. À mon avis, l'existence de ces pierres ouvrées s'explique par l'abondance des agates et des autres pierres dures qui se rencontrent près des roches basaltiques de cette région; et d'un autre côté, par la rareté du fer dans un pays qui manque du combustible nécessaire pour le fondre, et où la population (mongole) a horreur du travail de la terre.

2° Botanique.

Il ne m'est pas possible de m'étendre sur ce sujet autant que vous le désirez sans doute, vous, Monsieur, qui aimez avant tout l'attrayante science de Flore; et cela, pour la bonne raison que mes herbiers n'ont point encore été suffisamment étudiés: c'est un long travail que je réserve pour plus tard. Vous vous contenterez donc de mes notions un peu vagues souvent.

Vous savez déjà que les espèces végétales ne sont pas très-nombreuses dans le nord de l'Empire chinois. Mes fréquentes herborisations dans la plaine et dans les montagnes, ainsi que dans la Mongolie orientale, ne m'ont fourni en tout qu'environ quinze cents espèces de *Phanérogames;* et je crois que les recherches ultérieures augmenteront ce nombre de peu. Mais les montagnes du Setchuan occidental sont plus riches, surtout en végétaux ligneux.

Je parlerai de ces deux régions, bien différentes sous tous les rapports, en passant en revue les principales familles végétales, sous le point de vue de leur distribution géographique et de leurs rapports avec la flore européenne.

Cryptogames Cellulaires.—J'ai été toujours frappé de la rareté relative des champignons qui croissent en Chine. Il est vrai aussi que je m'y suis occupé d'histoire naturelle pendant une période de sécheresse, (qui parait finie depuis deux ans). On trouve cependant, toute l'année, à acheter à Pékin beaucoup de petite champignons séchés, appartenant au groupe des *Agaricus*, et qui nous viennent de la Mongolie. À Tientsin aussi se vend souvent, à l'état frais, une autre espèce de bon champignon qui croît dans les plaines sablonneuses.

J'ai rencontré dans nos montagnes, et surtout au Setchuan, un beau *Clavaria* comestible, et un de ces étranges *Chlatres* rouges, en forme de réseau arrondi, ressemblant beaucoup au *Chlatrus ruber* d'Italie.

Un autre curieux petit champignon est ce *Sphoria*, qui croît sur la tête des chenilles et des larves de cigale, et que la médecine chinoise emploie sous le nom de *tsao-tchong* (herbe-ver): c'est dans le centre-ouest que j'ai vu chercher le *tsao-tchong*.

Tout le monde connait le *Nostoc edule*, cette *Ulvacée* gélatineuse que les chinois mettent dans toutes leurs sauces de choix, et que l'on voit apparaitre sur les chemins, comme par enchantement, après les journées pluvieuses: le *mou-eul-tho* (ou oreille de bois) du commerce vient surtout du *Yunnan* où on le récolte sur les troncs de chêne pourris, ou coupés et étendus *ad hoc*.

Jusqu'aujourd'hui je n'ai guère eu l'occasion d'étudier les productions végétales de notre mer septentrionale. D'ailleurs, les *Algues* y paraissent peu nombreuses, (huit ou dix espèces!) et appartiennent surtout aux genres *Chondrus, Sargassum, Corallina*.

Cryptogames Vasculaires.—J'ai récolté dans le nord de la Chine et en Mongolie une quinzaine d'espèces de fougères, parmi lesquelles l'Européen revoit avec plaisir plusieurs formes de son pays: *Pteris aquilina, Osmunda regalis, Adianthum Capillus-Veneris*. On a tenté de séparer de cette dernière espèce, sous le nom d'*Ad. Capillus-Junonis*, une variété à folioles arrondies, qu'on trouve dans le voisinage de Pékin. Le *Pteris argyrea*, l'*Asplenium hallii*, des *Struthiopteris*, des *Nephobolus*, des *Nephrodium*, des *Aspidium*, etc., se trouvent en médiocre quantité dans nos montagnes; tandis que celles du Setchuan occidental abondent de fougères variées, dont les espèces m'ont paru devoir dépasser le nombre de cinquante.

Notre nord ne fournit que trois *Lycopodiacées*, appartenant au genre *Selaginella*. Les mousses aussi y sont peu nombreuses; tandis que, naturellement, elles abondent vers le Thibet oriental, dont le climat plus humide favorise leur multiplication.

Phanérogames.—Cette esquisse de botanique chinoise deviendrait longue outre-mesure si je devais traiter en détail de chacune des familles de ces végétaux. J'en parlerai donc brièvement, en sautant les moins importantes, et je dirai que, en fait de *Monocotylédones* aquatiques, un *Caulinia* analogue à l'espèce océanienne, est abondamment rejetée par les flots sur la plage de Takou; que nos canaux d'eau douce nourrissent le *Potamogeton crispus* et d'autres ressemblant à ceux d'Europe, le *Sagittaria sagittofolia*,

le *Butomus umbellatus*, l'*Alisma plantago*, (tous végétaux communs en occident); de même que l'*Acorus calamus*, le *Lemnagibba*, le *Phragmites vulgaris*, le *Typha intermedia*, le *Cyperus osculentus*, etc.

Sur la terre sèche, les *Aroïdées* sont ici très-rares: deux espèces, appartenant au genre *Arisoma*. Dans le Thibet oriental et au Setchuan, cette famille est bien représentée par de grandes et belles espèces, qui ne sont point encore étudiées.

Au sujet de la riche classe des *Graminées*, je note que l'Extrême-Orient me parait en nourrir beaucoup moins que notre Occident. En omettant les espèces cultivées, que tout le monde connait, je dirai que dans les limites du Setchuan et du Thibet, les bambous sauvages, et ceux qui sont artificiellement plantés, montent jusqu'auprès de la région des neiges perpétuelles; tandisqu'à Pékin nous n'en avons que deux pauvres espèces qui végètent à force de soin, dans les lieux abrités. Pour la première fois en Chine, j'ai trouvé au Setchuan un véritable *roseau*, ressemblant à notre *Arundo donax;* il y est abondant. Dans la même province on cultive communement deux espéces distinctes de cannes à sucre, dont la plus rustique et la plus répandue est mince et longue comme un Sorgho. Quant au *Sarghum saccharatum*, il n'y est jamais employé pour faire le sucre. Et les Européens doivent bien savoir que la fameuse eau-de-vie chinoise n'est point obtenue de la tige de cette plante, (comme en Amérique) mais bien de sa graine fermentée.

Je note aussi ici que le *Coix lacryma* entre dans le nombre des céréales alimentaires, cultivées dans les terrains humides.

Le Setchuan et les vallées du Thibet oriental nourrissent en quantité le *Chamorops* à chanvre; et j'ai retrouvé ce bel arbre jusqu'au milieu de montagnes passablement froides, au Kokonor oriental c'est d'ailleurs le seul palmier que j'aie vu au nord du Yangtzé, dont je pense qu'il ne dépasse pas le bassin.

La splendide famille des *Liliacées*, ne peut pas être passée si rapidement:

Nos montagnes du nord ne fournissent que trois lis, les trois à fleurs rouges-tigrées: *Lilium tigrinum*, *L. tenuifolium*, et un autre qui diffère de ce dernier par les feuilles plus larges, moins nombreuses, et par la fleur: je l'ai nommé provisoirement *L. Jeholense*, du nom du lieu où je l'ai observé pour la première fois. Les regions du centre-ouest nourrissent quatre ou cinq autre lis. Mais nulle part je n'y ai vu de *Tulipa*, de *Muscari*, d'*Asphodelus*, et d'autres liliacées si communes en Europe. J'ai récolté un *Fritillaria* dans

nos plus hautes montagnes, et deux autres dans celles de Moupin. La racine de l'un de ces derniers, qui a la fleur jaune, est très-recherchée pour la médecine chinoise, sous le nom de *Pé-mou;* cette plante ne croît que vers dix mille pieds d'altitude. Notre *Convallaria majalis*, et des *Polygonatum* de quatre espèces, ressemblent extrêmement à ceux d'Europe; de même que plusieurs de nos *Allium*, par exemple l'*A. victoriale*, dont l'ognon et les feuilles sont comestibles. Un *Veratrum* à fleurs noires est assez commun dans nos plus hautes prairies ainsqu'à Moupin, à côté de plusieurs *Gentiana* à fleurs bleues; et dans nos vallées incultes abondent le *Dioscorea alata*, le *Paris multifolia*, trois espèces d'*Asperges* (dont une se mange communément), les *Hemerocallis flava et fulva*, plusieurs *Smilax*, un *Gagea* à fleurs jaunes.

Les *Iris* rencontrés par moi dans le nord sont au nombre de cinq espèces; ils sont peu remarquables, et plus ou moins analogues à l'*I. graminea*. Le centre et l'ouest en donnent plusieurs plus beaux, dont un ressemble beaucoup à l'*Iris germanica*. Les *Pardanthus* du sud ne se voient pas au nord, et ni même à Moupin. Nulle part je n'ai trouvé de *Narcissus*, bien qu'on voit communément le *N. tazetta* dans les maisons chinoises.

Les parties de la Chine que je connais ne m'ont fourni qu'un assez petit nombre d'*orchidées*, parmi lesquelles je dois citer trois *Cypripedium* qui ont l'ait assez distingué.

Dicotylédones.—Je commence l'examen de ce grand groupe par faire observer que nulle part, dans mes nombreux voyages, je n'ai rencontré le *Cycas revoluta* à l'état sauvage: celle belle plante qu'on voit aussi souvent cultivée par les chinois, est sans doute originaire du Japon.

Conifères.—Je ne connais en Chine que trois *Pinus:* le *P. Bungeana*, bel arbre à écorce lisse et blanche, qu'on rencontre fréquemment autour de Pékin, mais que personne ne connait à l'état sauvage; le *P. longifolia*, ou *Sinensis*, répandu dans tout l'Empire; et un troisième qui ressemble au *P. maritima*, propre aux montagnes intérieures. Notre *Larix*, que j'ai retrouvé jusqu'au Kiangsi (mais point au Setchuan et à Moupin), me parait différer peu ou point du *L. europæa*. Le seul *Abies* du nord est un arbre mediocre qui végète aussi en Mongolie, mais qui prospère particulièrement en Mantchourie. J'ai rencontré quatre autres espèces de *Sapins* à Moupin et au Kokonor. Ces deux regions nourrissent encore, outre le *Cunninghamia* et le *Cephalotaxus* connus, deux autres beaux et très-grands conifères qui ressemblent à des *Sequoia;* et

un superbe *Cryptomeria?* qui a l'aspect d'un vrai *Araucaria*. Le *Juniperus* si commun autour des sépultures de Pékin, est remplacé dans l'Ourato par une autre espèce analogue au *J. oxycedrus*. Je ne dois pas oublier de noter aussi que le *Salisburia* ou *Jinko* résiste bien à nos rigoureux hivers, et que l'*Ephedra monostachya* abonde dans les plus nues de nos montagnes voisines de la Mongolie, et partout dans cette contrée.

QUERCINÉES.—À ma connaissance, le nord nourrit le *Quercus sinensis*, le *Q. obovata*, et un ou deux autres chênes à petits glands et à feuilles ordinaires. Le Setchuan occidental en contient plusieurs autres, dont un à écorce *Subéreuse*. Le *Castanea vulgaris?* est répandu un peu partout, tandisque le genre *Fagus* manque totalement à l'Extrême-Orient. Mais j'y ai trouvé plusieurs *Carpinus* ou *Ostrya*, et un *Corylopsis* curieux qui couvre toutes nos montagnes moyennes du nord. Deux véritables *Corylus* se rencontrent aussi dans nos rares forêts, et on en vend les fruits à Pékin; le Coudrier de Moupin forme un grand arbre pyramidal, de quinze mêtres de hauteur; mais ses noisettes ne sont pas belles en proportion. Le genre *Betula*, qui est représenté par trois espèces dans nos montagnes, a été retrouvé par moi, à mon grand étonnement dans les bois les plus élevés du Thibet oriental, en compagnie des *Saules marceaux*, et d'autres arbres tout-à-fait nouveaux pour moi.

Autrefois j'ai dit dans mes lettres que le genre *Alnus* n'est pas connu en Chine, c'était une assertion négative. Dans mon voyage au Setchuan j'ai trouvé une grande et belle espèce de ce genre, qui abonde jusqu'au Thibet et probablement plus loin: j'en ai donné le signalement dans mon journal de voyage que j'ai laissé au Muséum de Paris.

À propos des *Salicinées*, dont les espèces sont assez nombreuses et répandues partout, je dirai seulement que le *S. babilonica*, ou Saule-pleureur, si vulgaire dans toute la Chine, me parait ici aussi une plante introduite: nulle part je ne l'ai observé à l'état sauvage.

Sur quatre espèces de *Populus* du nord de la Chine, la plus grande et la plus belle croît dans la plaine de Pékin. Au Setchuan, les alentours de la ville de *Longanfou* m'ont offert un très-joli *peuplier* pyramidal, dont les rameaux sont fastigiés, plus encore que dans le *P. italica*.

En fait d'*ulmacées*, notre contrée nourrit trois espèces d'*ormeaux*, et plusieurs *Planera*. Le noyer ordinaire s'y trouve aussi partout, sauvage ou cultivé; quelques endroits de la province de Pékin fournissent des noix qui sont naturellement dépourvues de coque.

Un arbre qu'on trouve aussi partout est le *Celtis* de Chine, ainsique le *Murier*, dont il y a deux espèces, sans compter le *Broussonetia papyrifera*. A Moupin j'ai rencontré un arbre extraordinaire à inflorescence très-étrange, que je rapportais au genre *Morus:* il parait qu'il constitue un genre tout nouveau, et M. Baillon vient de le décrire sous le nom de *Davidia thibetana*.

Dans cette même région j'ai trouvé plusieurs *Ficus* indigènes; l'un rampe sur le sol, comme le lierre, et fructifie sous terre. Le magnifique *Ficus nitida*, qu'on vois près de toutes les pagodes du Setchuan, me parait y être une plante exotique.

Je passe rapidement sur les *Aristolochia*, dont j'ai vu quatre espèces en Chine; sur les *Thymélées*, dont le *Wikströmia* abonde sur nos collines sèches, et plusieurs *Daphne* à Moupin; sur les *Euphorbia* dont je connais une dizaine d'espèces chinoises. Le *Croton sebiferum* ne parait pas remonter plus au nord que le bassin du Fleuve-bleu; (de même que l'*Eleococca verrucosa*, dont les fruits vénéneux donnent le *tong-you* des chinois).

Dans les jardins de Pékin, les *Acalypha* remplacent nos *Mercurialis* d'Europe; et dans les montagnes, les *Phyllanthus* tiennent la place de nos bruyères. Les *Buxus*, inconnus au nord, sont représentées par deux espèces au Setchuan.

De même nous n'avons à Pékin aucun *Laurus*, tandis que le sud et l'ouest de la Chine en abondent. J'ai constaté que le *bois-de-rose* du Setchuan provient d'un autre arbre que le *Laurus camphora*, quoique du même genre, et qui y est devenu très-rare. J'ai vu aussi et admiré, dans la plaine de Tchentou, le célèbre *Nan-mou*, ou *Lan-mou*, faussement appelé Cèdre de Chine: c'est un véritable et magnifique laurier, dont le tronc s'élève tout droit jusqu'à une grande hauteur. Cet arbre affectionne les terres alluviales reposant sur un lit de cailloux. On sait que c'est avec le bois de *Nan-mou* que sont faites ces énormes colonnes que les voyageurs admirent dans la principale sépulture des Ming, à une journée de Pékin.

À propos des *Polygonées*, je noterai que le *Rheum palmatum*, abonde sur les grandes montagnes de Moupin et du Kokonor: c'est la rhubarbe la plus estimée des chinois. Les montagnes de Pékin et la Mongolie, en nourrissent une autre espèce, à feuilles entières, aux racines de laquelle les Russes paraissent donner la préférence. Les *Polygonum fagopyrum*, *tataricum*, et un troisième, ne sont pas seulement cultivés en Mongolie et au nord de la Chine, mais encore au Setchuan et au Thibet.

Un botaniste ne se rassasierait jamais de parler et d'entendre parler de plantes; mais, je dois me limiter; et je saute à pieds joints plusieurs familles végétales, qui auraient pourtant leur intérêt.....!

Notre nord nourrit trois espèces de lilas *(Syringa)* à l'état indigène: ce genre manque au sud. Nous avons encore deux *Ligustrum*, propres à nos montagnes, tandis que le sud possède à son tour le *L. lucidum*, etc. Le genre *Fraxinus* a deux espèces à Pékin, et une au Setchuan. On sait que c'est sur ce *frêne* et sur le *troëne* qu'on y élève l'insecte qui produit la cire blanche dite *paé-la*.

Les *Primula*, nombreux à Moupin (mais sans jamais offrir la couleur jaune) ne présentent à Pékin qu'une petite espèce à fleurs rouge-ponceau, qui vit sur les plus hautes montagnes, à côté du *Polemonium coruleum*, du *Pyrola rotundifolia*, du *Geranium phoum*, etc.; mais nous avons en abondance l'*Androsace saxifragifolia*, des *Cortusa*.

On sait que la Chine ne possède aucun *Erica;* mais, en échange, les *Rhododendron* y foisonnent, surtout à Moupin. Au nord nous n'avons que le *Rh. dauricum*, et une autre espèce à fleurs blanches; mais les hautes montagnes du Setchuan occidental m'en ont fourni au moins *une quinzaine*, les unes plus belles que les autres, (sans compter les variétés nombreuses). L'une de ces espèces, que j'ai nommée pour cette raison, *Rh. rotundifolium*, est remarquable par ses feuilles rondes, forme étrange pour ce genre. Deux autres splendides espèces croissent jusqu'à la taille de nos grands pommiers, ayant un tronc d'un pied et deux de diametre. Dans les plus grandes montagnes, ce sont les arbres qui montent le plus haut, et jusqu'à la limite de la végétation ligneuse.

Les *Araliacées* représentées dans le nord par deux espèces (le *lierre* n'y figure pas), le sont plus richement au Setchuan. J'y en ai vu une grande variété de formes, depuis les *Hedera* rampants jusqu'aux grands *Aralia* couverts d'épines.

Les *Cornus*, dont le Tchély donne une humble espèce, assez semblable au *C. sanguinea*, sont aussi plus remarquables et plus nombreux dans les vallées du centre-ouest.

Renonculacées.—Les plantes de cette famille sont comparativement bien moins abondantes en Chine qu'en Europe, du moins les espèces herbacées. Ainsi, je n'ai rencontré ici que sept à huit espèces de vrais *Ranunculus*: le *R. sceleratus* est l'un des plus communs et ne diffère pas de la plante européenne. Deux seuls

Anemone, ou trois, ont été récoltés par moi dans les hautes montagnes du Tchély et de la Mongolie; mais le Setchuan oriental en possède trois autres grandes espèces qui lui sont propres, ainsi qu'un *Helleborus* à fleurs blanches, qui est excessivement abondant dans les vallées humides. Les plaines du pays de *Ortos* possèdent un *Ficaria* à fleurs odorantes et à feuilles lobées. Tout le monde connait les *Pœonia* de Chine; nulle part je n'ai rencontré le *Moutan* à l'état sauvage, mais nos hautes vallées nourrissent en quantité deux *Pivoines* à fleurs blanches, roses ou rouges, et odorantes aussi. Le *Trollius chinensis* est aussi abondante dans les mêmes lieux, surtout dans les prairies élevées, et porte des fleurs bien plus grandes que l'espèce d'Europe. Deux *Delphinium* à grandes fleurs bleues, et un autre à fleurs plus modestes, ont été aussi rencontrés par moi, tant au nord qu'au sud-ouest. Un *Aconitum*, analogue au *Napellus*, en autre remarquable par ses longues tiges volubiles, et plusieurs autres encore, vivent communément sur les hauteurs. Bien que le *Nelumbium speciosum* couvre nos lacs et nos étangs du nord, (où cette plante si belle prospère très-bien, grâce à la chaleur de notre long été) en compagnie de l'*Euryale ferox*, aux immenses feuilles épineuses flottant sur l'eau, nulle part je n'y rencontré, à l'état sauvage et spontané, d'autre *Nymphoacée* qu'un tout petit *Nuphar* à fleurs jaunes.

Les *Renonculacées* arborescentes sont représentées dans le nord par six ou sept espèces de *Clematis*, toutes propres à l'Extrême-Orient; et dans le sud-ouest par un plus grand nombre d'autres espèces. Un *Clematis* des montagnes de Pékin, à larges feuilles de *Dahlia*, et à fleurs bleues odorantes, a été distinct du *Cl. Mongolica* par M. Decaisne, et décrit sous le nom de *Cl. Davidi*. Nous avons encore deux espèces d'*Atragene;* celle que j'ai récoltée dans l'Ourato occidental *Atr. floribunda* est remarquable par ses grandes fleurs pourpres, naturellement doubles. Un *Cimicifuga* colossal se trouve dans les vallées les plus froides. Et l'*Aquilegia sibirica*, commun dans nos montagnes, est remplacé en Mongolie par une curieuse espèce à fleurs vertes, *Aq. viridiflora*.

Dans les hautes montagnes du Setchuan et de Moupin, j'ai récolté trois espèces de *Magnolia* à fleurs blanches, qui deviennent de grands arbres. Ces belles plantes me semblent différer des autres *Magnolia* connus de Chine, et deviennent de plus en plus rares, parceque les herboristes chinois en recherchent l'écorce, comme un des leurs plus précieux médicaments.

Je ne connais que deux *Berberis* du nord de la Chine, mais Moupin m'en a montré plusieurs autres différant des nôtres, donc un porte des fleurs d'un noir pourpre.

Une *lardizabalée* grimpante, à blanches fleurs odorantes, représente dans les montagnes de Mongolie une famille de plantes américaines.

Papaveracées.—Je crois qu'aucun vrai *Papaver* n'est indigène des parties de la Chine que je connais, quoique le *P. somniferum* ne soit que trop cultivé des chinois. Mais j'ai récolté sur nos plus hautes montagnes du nord l'élégant *Meconopsis cambrica;* et à Moupin, deux autres grandes espèces du même genre, hérissées de poils, qui donnent des fleurs d'un lilas tendre. Trois espèces d'*Hypecoum* sont peu répandues, excepté une à jolies fleurs jaunes et odorantes, qu'on rencontre en quantité dans les terrains sablonneux du nord, où elle remplace nos *Glaucium.* Je n'ai trouvé que rarement le *Chelidonium majus,* et cela dans les montagnes de l'Ourato, mais jamais à Pékin.

Fumariées.—Aucun vrai *Fumaria* n'existe en Chine, à ma connaissance; ils y sont remplacés par plusieurs *Corydalis* à fleurs jaunes ou violettes, et par l'élégant *Dielytra spectabilis.* Et à propos de cette dernière plante, je ferai observer ici, que notre Extrême-Orient et l'Amerique septentrionale offrent aux botanistes, (plus qu'aux zoologistes) bien des points de ressemblance de grande signification. Ainsi, le *Dielytra spectabilis* a son représentant dans le *D. formosa* d'Amerique. De même nos *Pavia,* nos *Cercis,* nos *Catalpa,* nos *Magnolia,* nos *Bignonia,* nos *Diervilla,* notre *Sambucus adnata,* notre *Nelumbium speciosum,* etc., ont leurs analogues et leurs plus proches parents sur le nouveau Continent et non point en Occident.....

Crucifères.—Pour cette famille si abondante en Europe, je dirai seulement qu'elle l'est beaucoup moins en Chine. Quelques espèces européennes y sont cultivés communément comme les *Cheiranthus cheiri* et *incanus,* ainsi que le *Chou* au Setchuan, et les *Brassica napus* et *rapa.* Je ne saurais dire si les *Moutardes,* qu'on sème communément pour l'huile, sont indigènes ou non.

Voici, au sujet des crucifères à graine oléagineuse, un fait qui mérite d'être cité. Quand on brûle ou que l'on coupe les forêts vierges des grandes montagnes de Moupin, il parait qu'il nait spontanément sur cette terre une grande abondance de moutarde à huile, dont on récolte avidement la graine. On se demande d'où vient cette semence? Ce n'est point du voisinage: il n'y en a pas.

Il n'en croissait point non plus évidemment sous ces sombres bois. Il faut donc admettre que la graine a été portée par les seuls éléments (on ne sait quand ni comment), ou qu'elle a été déposée sur ce sol, avant l'existence de ces forêts dites primitives, et qu'elle s'y est conservée pendant une longue série de siècles. Quelle vitalité dans ces germes des crucifères !

Violariées.—Quoique les pays accessibles aux Européens ne leur offrent guère que le *Viola patriniana*, si répandu partout du sud au nord, je crois pouvoir avancer que les violettes sont tout aussi nombreuses en Chine qu'en Europe, et qu'elles diffèrent toutes des notres, excepté peut-être la petite espèce jaune des Alpes. Nos montagnes, et surtout celles du Setchuan, en nourrissent un bon nombre de variétés, parmi lesquelles il y en a une qui est aussi parfumée que le *V. odora* de nos pays.

Je ne connais pas de *Résédacées* en Chine; et mes *Polygalées* de ce pays ne montent qu'à quatre espèces. Trois *Helianthemum* particuliers forment des buissons touffus sur les rochers de nos montagnes élevées; mais plus bas, on ne rencontre aucune de ces gracieuses plantes à fleurs si caduques qui abondent sur les collines pierreuses de l'Europe méridionale.

Le cosmopolite *Parnassia palustris* se trouve aussi au nord de la Chine; mais sur les bords du Fleuve-bleu j'en ai rencontré une autre très-jolie espèce dont les pétales sont terminés par de longs cils.

Notre riche famille des *Caryophyllées* me parait assez mesquinement représentée ici. Il y a quatre ou six œillets en tout, parmi lesquels le *Dianthus dentosus* est le plus commun; le plus remarquable croît dans les prairies élevées, avec des tiges de deux et trois pieds de haut, et des fleurs roses terminées aussi par de longs cils filamenteux. Une plante du même aspect, mais plus solide, foisonne sur les collines de Kiou-kiang. Je ne me rappelle pas que le Setchuan occidental m'ait offert aucune espèce de *Dianthus*, à l'état sauvage. Il y a quelques *Silene*, dont un assez semblable au *S. inflata;* et dans les montagnes de l'ouest de Pékin croît un très-beau *Lychnis*, à grandes fleurs d'un rouge-orange. En général, toutes les *Caryophillées* chinoises diffèrent spécifiquement de celles d'Europe.

Abrégeons-nous, et laissons de côté les herbes moins importantes. Le *Kölrenteria paniculata* est propre à la partie septentrionale de la Chine, ainsique l'*Ailantus glandulosa* et le *Xanthoceras sorbifolium:* c'est seulement dans les montagnes de l'Ourato que j'ai

vu ce dernier à l'état sauvage. Le *Cedrela sinensis* (qu'on confond souvent avec l'Ailante) se cultive autant au nord qu'au sud pour ses aromatiques bourgeons à odeur de cuisine, que les Chinois mangent comme une friandise.

Outre ces arbres, nous avons dans le nord l'*Acer tataricum* et un autre *érable* propre à l'Ourato; le centre-ouest en offre plusieurs du même genre, et le Kiangi, un remarquable par ses feuilles d'*ormeau*. Le *Pavia*, qui est le marronnier de la Chine, n'est que rarement cultivé à Pékin; plus au sud il est commun dans la région où croîssent aussi le *Melia azederach*, le *Fortunea sinensis*, le *Liquidambar*, etc. Les *Xanthoxylon*, nombreux dans le centre, ne sont représentés à Pékin que par le *Xanthoxylon bungei*, ou *poivrier rouge*.

Notre nord ne connait aucune *Ternstromiacée* et dans l'ouest et le centre de la Chine je n'ai jamais rencontré le *thé* à l'état sauvage. Mais, outre les deux variétés bien connues sous les noms de thé vert et thé noir, j'y en ai vu une troisième, qu'on apelle *thé blanc*: c'est un arbrisseau plus grand, avec des feuilles plus aiguës et blanches en dessous. Cette espèce est plus rustique mais moins prisée comme goût.

Aucune *Aurantiacée* ne croît non plus spontanément plus haut que le bassin du Fleuve-bleu; mais, en échange, nous avons plusieurs *Cissus*, *Ampelopsis* et *Vitis*: le *V. amurensis*, à grappes noires mangeables, est fort abondant dans nos montagnes intérieures.

De même les *Sterculia* et les *Paulonia* ne dépassent point la région susdite; mais nous avons dans nos bois les sympathiques *tilleuls* aux suaves fleurs (trois espèces), le *Grewia parviflora*. Le *Corchorus* du Japon croît en quantité à Moupin, à côté des *Jasmins*, des *Forsithia*, etc.

Les *Tamarix* de deux espèces, me semblent se retrouver identiques au nord et au sud, tandis que les *Philadelphus* et les *Deutzia* appartiennent plus particulièrement à notre nord. De même, les lieux frais et ombragés de nos montagnes abritent des *Begonia*, en guise de *Saxifraga*. Et ce dernier genre est à peine représenté ici, tandis que les régions pluvieuses de Moupin en nourrissent plusieurs espèces, appartenant la plupart à des types inconnus en Europe, ayant des fleurs jaunes, etc. Pourtant j'en ai rencontré une grande espèce à fleurs roses, qui ressemble beaucoup au *S. crassifolia* que j'ai vu cultivé en Europe. Quant au *Sax. sarmen-*

tosa, je l'ai trouvé abondant par toute la Chine centrale et occidentale.

Moupin m'a offert encore quatre ou cinq espèces de *Ribes*, non comestibles; tandis que nos montagnes et la Mongolie en nourrissent trois, bonnes à manger (y compris l'espèce à gros fruits verts, analogue à notre *Maquereau*). Passons aux *Rosacées*. Un *Pirus*, deux *Malus*, un *Sorbus*, plusieurs *Amelanchier* et *Cotoneaster*, et deux *Cratogus*, sont les seuls arbres *pomacés* que les bois du nord m'aient fournis, à l'état sauvage. Je n'en ai point trouvé dans les régions du centre-ouest, à l'exception des *Cratogus*, et peut-être d'un *Pirus*.

Nos montagnes nous offrent deux jolis *Rosa*, à fleurs rouges et odorantes; celles de Mongolie un autre *rosier* à fleurs jaunes, qui y est très-abondant, à Moupin j'ai vu beaucoup d'autres *Rosa*, dont la plupart me paraissent se retrouver au Tchékiang.

Pour les *Amygdalées*, nous avons dans notre nord le *Cerasus padus;* un petit *Prunus* à excellents fruits rouges, et quelques *Amygdalus* insignifiants. Point de véritable *Amandier* analogue à celui d'Europe. Les genres *Armeniaca* et *Persica* croîssent si abondamment et si spontanément dans toutes nos montagnes, que je suis porté à croire que cet Extrême-Orient est leur véritable patrie d'origine.

Nulle part je n'ai trouvé en Chine de *prunier* ressemblant à ceux d'Europe, à l'état sauvage; pas même à Moupin, où la seule *Amygdalée* spontanée rencontrée par moi est un grand cerisier à médiocres fruits rouges.

En dehors d'un framboisier à bons fruits rouges, qui croît dans nos vallées les plus fraiches, nous n'avons au nord qu'un autre petit *Rubus* rampant. Mais, des ronces de toute sorte abondent entre le Setchuan et le Thibet. Là, dans les montagnes moyennes, croît aussi en quantité une bonne fraise rouge, à forme allongée. Je ne saurais dire si ce *Fragaria* est le même que celui qui vit à *Si-wan*, en Mongolie.

Outre un *Spiroa* herbacé, analogue à l'*Aruncus*, nos montagnes en contiennent six autres espèces, ligneuses, à fleurs blanches. Ce genre m'a paru moins bien représenté au sud.

Les arbres de la famille des *Légumineuses* sont beaucoup plus nombreux en Chine qu'en Europe. Notre *Acacia julibrizin* y est répandu du sud au nord, et je l'ai retrouvé spontané jusque dans les vallées rétirées de Moupin. Au contraire le beau *Sophora* de Pékin ne s'étend pas jusqu'au sud, et dans les hauts plateaux de

Mongolie, un autre *Sophora* de petite taille, herbacé, à blanches fleurs odorantes, couvre partout les sables, en compagnie des *Iris* blancs, du *Glycyrhiza echinata*, de deux ou trois *Caragana*, et de deux curieuses espèces de *liserons*, épineux et non volubiles.

Dans nos collines, les *Genista*, les *Ulex*, les *Cytisus*, les *Anthyllis*, les *Ononis* d'Europe, sont remplacés par les *Indigofera*, les *Lespedeza*, les *Desmodium*, les *Caragana*, les *Gledistkia*. Je n'ai pas trouvé à l'état sauvage, au Setchuan la *Glycine* qui abonde tant au Tchékiang.

En fait de *Sumacs*, nous avons au nord: le *Rhus Cotinus*, le *Rh. Semialata*, rare, et un autre *Rhus*, analogue au *Coriaria*. Le *Sumac* dont j'ai vu au Setchuan extraire le vernis, ou *tchy*, est un arbre d'une dizaine de mètres de hauteur.

Dans la partie orientale de cette même province, j'ai admiré à *Kouy-fou*, un grand et magnifique *Pistacia*, genre inconnu ici, au nord.

Enfin, pour en finir avec les arbres chinois, j'ajouterai que les *Ilex*, qui nous manquent à Pékin, abondent au centre-ouest. Les *Evonymus* et les *Celastrus*, se retrouvent partout, de même que les *Rhamnus;* cependant notre nord est plus riche que le sud en espèces de ce dernier genre. De même aussi, le *Zizyphus vulgaris* qui couvre et empeste toutes nos collines, manque absolument au Setchuan et au Thibet, où se trouvent, à leur place, des *Paliurus*, aux aiguillons non moins terribles.

Je mets fin à cette énumération de plantes, si longue déjà et pourtant bien incomplète, en ajoutant que la pauvre Flore de la haute Mongolie est surtout caractérisée par le grand nombre de ses *Artemisia*, de ses *Astragalus*, de ses *Aster*, de ses *Chenopodium*, de ses *Salsolées*, de ses *Statice*, (outre les plantes déjà indiquées plus haut). Il faut citer aussi le gracieux *Caryopteris mongolica*, petit arbuste aux fleurs bleues et odorantes, les *Linum* de plusieurs espèces, les *Plantago*, l'ortie à feuilles de chanvre, etc.

Dans les montagnes, là comme au Tchély, les végétaux ont l'air tout européen: on y voit le *Sambus racemosa*, plusieurs *Xylosteum* et *Lonicera*, des *Viburnum*, le *Vitex incisa*, un *Thymus* aromatique, plusieurs *Geranium*, quatre ou cinq *Valeriana* et *Patrinia*, des *Campanula*, des *Scabiosa*, des *Synanthérées* fort nombreuses, etc.

Dans notre plaine, le bord de tous les chemins nous offre le *Sambucus Williamsi*, le *Calystegium acetosifolium*, le *Portulaca olitoria*, le *Rehmannia glutinosa*, le *Tournefortia arguzia*, le *Taraxacum vulgaire*, l'*Euphorbia Pekinensis*, les *Polygonum aviculare*

pensilvanicum, et d'autres; mais point de *Trifolium*, point de *Verbena*, point d'*Oxalis*. De leur côté, des *Cynanchum* de plusieurs espèces, le *Houblon* japonais, le *Rubia sinensis*, le *Tribulus terrestris*, le *Xanthium strumarium*, etc., embarrassent partout plus ou moins les pieds des passants.

Quant au *facies* général de la flore du Setchuan occidental, elle offre, même sur les montagnes, un aspect tout particulier et les plantes que j'y ai indiquées ne forment qu'une fraction des richesses végétales de cette intéressante contrée. Il restera donc là beaucoup à faire pour un botaniste de bonne volonté.

Zoologie.

Mollusques.—En dehors d'un petit *Helix* qui abonde à Pékin, les mollusques terrestres sont extrêmement rares dans la Chine septentrionale et la Mongolie. Je n'y en ai réuni qu'une dizaine d'espèces en tout, y compris un petit *Limax* grisâtre. Quelques Helix fossiles se trouvent aussi dans le *loess*.

Le Setchuan et Moupin ne sont guère mieux partagés en animaux de cette classe. J'en ai rapporté une autre dizaine d'espèces, différant toutes de celles du nord, parmi lesquelles figurent les genres *Clausilia* et *Bulimus*, inconnus dans le nord. Dans cette même région est très-développé un calcaire bleuâtre, qui est comme pétri de débris de Coquilles Marines: je pense que cette roche est antérieure à la formation carbonifère. On m'a indiqué encore des couches fossilifères dans la partie orientale de cette même province du Setchuan.

Moi-même, en voyageant le long du Yangtzé, j'ai recueilli des *Bivalves* silicifiées, qui semblent appartenir aux terrains dévoniens.

Crustacés.—Toutes nos eaux, jusqu'aux ruisseaux des montagnes, nourrissent en abondance une petite crevette, que les Chinois mangent avec délice, sèche et rance. Le crabe ordinaire du pays (*Telphusa sinensis*) vit dans les fleuves du nord, du sud, et de la Mongolie. Les eaux de la Chine n'offrent point d'écrevisse; mais des Coréens et des Missionnaires qui ont longtemps vécu en Corée, m'ont assuré que dans les montagnes de ce royaume si peu connu, il y en a une, qu'ils mangent communément, et qui diffère de l'*Astacus* d'Europe par une forme plus effilée. (Pour les crustacés marins, je dois dire comme pour les algues: je n'ai pas encore eu l'occasion de m'en occuper).

INSECTES.—Dans une vaste contrée qui n'a pas encore été beaucoup explorée il est naturel qu'il existe bien des insectes intéressants et non décrits. Cependant je dois avouer que je m'attendais à en trouver en Chine beaucoup plus d'espèces nouvelles, surtout dans les genres remarquables; ma déception a été particulièrement grande au Setchuan occidental, qui ne m'a fourni relativement que peu de nouveautés entomologiques.

Dans les Coléoptères, le nord de la Chine et la voisine Mongolie, m'ont donné une dizaine d'espèces de *Cicindela;* et Moupin, cinq autres, avec deux *Collyris* en outre. Pour les carabiques, on devrait s'attendre à trouver des *Damaster*, sur notre continent: et pourtant, pas du tout! Ces beaux coléoptères, à forme de *Blaps*, paraissent exclusivement propres au Japon, où chacune des trois grandes îles possède son espèce particulière.

À Pékin nous avons les *Calosoma lugens* et *sinense*, le beau *Carabus smaragdinus*, (proche parent du *Cœlestis* du Tchékiang); le *C. vinculatus*, le *C. kluberi;* l'*Eupachys Brandtii*, très-abondant sous les pierres de la ville. À Moupin, j'ai trouvé le *Calosoma thibetanum* et le *Carabus modestus* (deux insectes nouveaux), et le grand *Carabus pustulifer*, autre nouveauté remarquable, dont la Chine orientale a l'analogue dans le *C. Lafossei.*

Les *Brachinus* que j'ai rencontrés montent à trois ou quatre espèces: la grande forme, à élytres testacées et marquées de noir, est la plus répandue.

Les *Lamellicornes* m'ont offert une moisson plus abondante. Le nord de l'Empire m'a donné trois espèces de cerfs-volants (y compris le *Lucanus suboneus*), et le centre-ouest quatre ou cinq autres. J'ai pris, tant à Moupin qu'à Pékin, un grand *Melolontha*, ressemblant à notre *fullo*, qui a reçu le nom de *Gracilicornis:* cet insecte parait rare par tous ces pays, de même en général que les autres *Melolontha* de grande taille. Parmi ceux-ci il y a aussi des nouveautés, comme le *M. cuprescens*, etc. Les *Cetonia*, et genres voisins, sont assez nombreux; et à Moupin j'ai rencontré en petit nombre deux jolies Goliathides: *Dicranocephalus Adamsi*, et *Neophodimus Auzonæii.* Un étrange et nouveau bousier du même pays est l'*Enotrupes sinensis.*

Les *Longicornes* ou *Cerambycides* sont peut-être les coléoptères les plus nombreux, relativement, que j'ai rencontrés en Chine, tant au nord qu'au sud.

Parmi les espèces nouvelles de ce groupe je cite: *Collichroma cyanicornis*, *Mesosa stictica*, *Pachyta tuberculicornis*, *Strangalia dichroa*, *Str. arcifera*, *Str. zonifera*, *Str. thibetana*, etc.

Passons aux Lépidoptères, en sautant sur les autres classes d'insectes qui intéressent moins le commun des hommes.

Le nord ne nourrit que trois *Papilio: Maackii, Xuthus,* et le *Machaon* d'Europe; un *Thaïs,* le *Sericinus Telamon* offrant une variété à ailes glacées en dessous, est répandu par toutes les vallées où croissent les *Aristolochia*; un *Parnassius,* qu'on prendrait pour l'*Apollo,* fréquente les hautes montagnes de Pékin et de Mongolie. Les *Pieris daplidice, napi* et *rapo,* avec deux *Leucophasia,* se voient ici communément, ainsi que les *Leuconoa cratogi* et *cratogioïdes:* mais, point d'*Anthocharis* au nord. Nous avons encore les *Rhodocera Rhamni* et *Aspasia,* différant peu de notre *Citron* de France; je n'ai pris que deux fois le *Colias aurora* en Mongolie; mais la Chine présente deux autres *Colias* fort abondants

En été, un beau *Nymphalien,* l'*Antiope assimilis,* est fort commun partout, sur le tronc des arbres, et une autre espèce de même genre, fréquente la cime des montagnes boisées. Le genre *Argynnis* m'a donné à Pékin huit espèces (dont trois européennes: *Adippe, Laodice, Daphne*); une, fort curieuse, sans taches nacrées, se rapproche des *Melitoa,* et a reçu de M. Lucas le nom d'*Arg. leopardina.*

Dans le genre *Vanessa,* Pékin et son voisinage possedent le *V. Antiopa,* le *V. Yo,* le *V. polychloros?* le *V. cashmiriensis* ressemblant à l'urtice), le *V. cardui,* le *V. Callirrhoe* (ressemblant à l'Atalanta), le *V. C. aureum* et un autre voisin du *Robert-le-diable.* Le sud-ouest possède bien d'autres vanesses encore.

Nos montagnes septentrionales sont assez riches en espèces des genres *Neptis* et *Limenitis*; de même qu'en *Lyconites,* dont plusieurs sont nouvelles. Nous n'avons ici qu'une seule *Arge,* et une dizaine de *Satyrus,* dont aucune ne se retrouve en Europe. Les Hespériens sont représentés par au moins autant d'espèces de petite et moyenne taille. Un *Syntomis,* un *Thyris (Vitrina?),* trois ou quatre *Procris* et autant de *Sesia,* remplacent ici les *Zoygona,* qui font défaut à l'Extrême-Orient. Dans les *Sphingiens,* les *Macroglossa stellatarum* et *Bombyliformis?* se retrouvent à Pékin; de même que l'*Acherontia Atropos,* et les *Deilephila convolvuli* et *Pinastri.* Mais quatre ou cinq autres Sphinx lui sont particuliers.

À propos des Lépidoptères noctures, je noterai seulement que le nord de la Chine parait relativement pauvre en espèces; mais que, depuis deux ans que des pluies plus fréquentes ont donné à la végétation une vigueur inaccoutumée, nous y voyons aussi beau-

coup plus de papillons de nuit et de jour qu'auparavant. Je note aussi que c'est au milieu des sauvages montagnes de l'Ourato que mon compagnon de voyages M. L. Chevrier, a rencontré le véritable ver-à-soie du murier, dans son état primitif et parfaitement sauvage.

Au Setchuan occidental, la Faune entomologique contient beaucoup plus de Lépidoptères remarquables. Le genre *Papilio* m'y a fourni les espèces suivantes: *Heliacon, Paris, Bianor, Arcturus, Pammon, Protenor, Chloanthus, Glycerion, Xuthus, Machaon, Hercules,* et *Horatius.* Ces deux derniers sont nouveaux. Les *Thaïs* véritables y manquent aussi, et sont représentés par un très-joli papillon, nouveau aussi, pour lequel ou a créé un genre nouveau: *Armandia thaïtina,* Bl. Il y a plusieurs autres nouveautés encore, comme le *Vanessa prorsoïdes,* analogue à la *Carte-géographique* d'occident, et présentant comme celui-ci les deux formes de printemps et d'été; les *Thecla saphir* et *betuloïdes;* les *Rhodocera almintha* et *alvinda,* etc. J'ai récolté encore dans ces régions les *Argynnis Childrenæ* et *Nyphe,* les *Adolias Franciæ* et *Daola,* le *Charaxes Dolon,* etc. Le seul genre *Satyrus* m'y a donné une trentaine d'espèces, dont aucune ne se retrouve en Europe, ni même à Pékin.

En quittant les Insectes, je fais observer un fait curieux: c'est que ces régions du centre-ouest paraissent ne pas connaitre le Scorpion; mais les *Scolopendra* y foisonnent. Et ce sont ces insectes et un autre *Myriapode,* à forme de *Cloporte,* (un *Glomeris*), que les chasseurs y emploient pour empoisonner la panthère. Je n'ai point non plus rencontré là le *Telyphona,* cette grande et hideuse *Arachnide* à forme de scorpion qui abonde au Tchékiang central.

Animaux Vertébrés.

Amphibiens.—Le nord de la Chine ne possède point de *Salamandre;* mais j'en ai trouvé au Setchuan deux espèces, qui sont nouvelles, et une troisième au Tchékiang tout dernièrement, pour laquelle j'ai proposé le nom de *Triton (Cynops) Orientalis.* L'espèce de Moupin a cela de particulier que l'on ne peut la rapporter qu'à un genre américain: je l'ai fait connaitre sous le nom de *Desmodactylus Pinchonii,* du nom de Monseigneur Pinchon qui me l'avait signalée le premier et qui m'a rendu de grands services pendant mon voyage au Setchuan occidental. La troisième espèce

est un *Sieboldia*, analogue à la grand Salamandre du Japon, sur laquelle M. E. Blanchard, de l'Institut, a lu un travail à l'Académie des Sciences, en l'appelant *Sieboldia Davidiana*.

Les *Amphibiens raniformes* sont à Pékin au nombre de cinq ou six, parmi lesquels figure l'*Hoplobatrachus Davidi*, A. Dum., qui vit aussi au Japon.

Le Setchuan occidental, pour les *Anoures*, ne m'a donné de particulier, outre la *Reinette (Dendrhyla sinensis)* que deux fort jolies *Polypedates*, pour l'une desquelles j'ai proposé le nom de *P. Dugritei*, en souvenir de ce digne missionnaire qui m'a donné l'hospitalité à Moupin. Les grenouilles que j'avais récoltées au Kiangsi montaient à sept espèces.

Poissons.—Les eaux douces de Pékin et de Mongolie m'ont fourni une vingtaine d'espèces de poissons: *Ophiocephalus argus*, *Silurus xanthosteus*, *Philipnus cinctus* (n. sp.), *Gasterosteus sinensis* (n. sp.), *Polyacanthus opercularis*, *Cobitis pavonaceus*, *Symbranchus marmoratus*, *Monopterus javanicus;* et d'autres *Cobitis*, *Gobio*, *Leuciscus*, *Anguilla*.

Les rivières et les ruisseaux du Setchuan m'ont donné plusieurs des poissons de Pékin, et de plus: le *Nemacheilus nudus*, Bl., le *Misgurnus spilurus*, Guich., l'*Hemiculter leucisculus*, Bl., le *Saurogobio Dumerili*, Bl., et plusieurs autres non encore décrits. Le plus remarquable de ces derniers est un *Siluroïde*, de nouveau genre, que les habitants de Moupin nomment *Che-pa-zze*. Je n'ai jamais vu de *Salmonide* en Chine, quoique les auteurs en indiquent un à Pékin.

Reptiles.—Les espèces que j'ai rencontrées au nord de la Chine sont: *Platydactilus japonicus*, *Eremias variabilis*, *Phrynocephalus caudivolvulus;* *Trigonocephalus Blomhoffii*, *Elaphis Dione*, *Zamenis cataphoronotus*, *Tropidonotus lateralis*, *Amphiesma tigrinum*. Cela fait trois *lacertiens* et cinq serpents seulement.

Au Setchuan occidental aussi, les reptiles sont peu nombreux; j'en ai rapporté huit serpents et deux *Lézards (Lyriocephalus margaritaceus* et *Plestiodon quinquelineatum)*. Les serpents ont donné un genre nouveau et quatre espèces nouvelles. Parmi ces dernières, j'ai donné le signalement d'un beau *Coryphodon*, de grande taille, que j'ai voulu dédier à M. Arnal *(Cor. Arnali)*: c'est ce missionnaire qui a fourni à M. Dabry presque tous les oiseaux nouveaux qu'il a envoyés en Europe. Déjà, mon excursion du Kiangsi m'avait donné une quinzaine de reptiles différents, parmi lesquels un autre *Coryphodon* et un *Elapoïdes* constituent des

espèces nouvelles. La vipère de Mongolie (*Trig. Blomhoffii*) s'y trouve en abondance dans la ville même de Kiou-kiang, de même que le *Gecko* du nord. Les autres lézards sont: *Plestiodon pulchrum, Tachydromus sex-lineatus, Lygosoma Quoyi.* Et en fait de serpents déjà connus, il y a: *Eluphis virgatus El. conspicillatus, Amphiesma tigrinum, Lycodon rufuzonatus, Tropidonotus lateralis, Bungarus semifasciatus, Naja tripudians,* etc.

En fait de Tortues, je ne connais à Pékin que le *Gymnopus perocellatus,* qui vit aussi au sud-ouest, avec l'*Emys sinensis.* Nulle part je n'ai vu dans le Yangtzé, la monstrueuse tortue carnassière que j'ai rencontrée une fois dans le fleuve de Hantcheoufou, au Tchekiang. M. Swinhoe m'a dit que cet animal serait une espèce indienne, *Chitra indica.*

Oiseaux.—Je regrette que les trop grandes proportions que prend ce travail m'empêchent de m'étendre autant que je voudrais sur les oiseaux et les mammifères du nord de la Chine, depuis le Fleuve-bleu jusqu'à la Mongolie orientale.

Dans un rapport que j'addressais au Museum de Paris en 1866, j'énumerais 295 espèces d'oiseaux observés ici par moi, jusqu'à cette époque. Nécessairement il y avait dans ce catalogue provisoire des lacunes et des fautes de détermination. Depuis, mes voyages ultérieurs, prolongés jusqu'au Fleuve-bleu et au Thibet oriental, m'ont fait connaitre bien d'autres espèces; et au commencement de cette année 1872, les nouvelles archives du Muséum ont publié mon nouveau catalogue des oiseaux du nord de l'Empire Chinois, (où aussi je constate déjà quelques inexactitudes). Cette liste comprend 470 *espèces;* sur ce nombre, un peu plus d'un quart sont des espèces européennes; 160 *espèces* n'avaient pas encore été signalées par les ornithologistes comme faisant partie de la faune chinoise, et 55 *espèces* ont été présentées et décrites comme tout-à-fait nouvelles.

De ces dernières, le nord m'a fourni: *Cygnus Davidi,* Sw., *Passer Ouratensis,* A. D., *Carpodacus Davidianus,* M. Edw., *Carpodacus mongolensis* (A. D. in letteris 1865), *Parus Pekinensis,* A. D., *Orites Ouratensis,* A. D., *Sitta villosa,* J. V., *Oropneuste Armandi,* M. Edw., *Rhopophilus pekinensis,* Sw., *Pterorhinus Davidi,* Sw.

Les espèces nouvelles d'oiseaux que j'ai rapportées du centre-ouest sont: *Picus Desmursii,* J. V., *Picoïdes funebris,* J. V., *Picus flavirostris,* A. D. (obs.), *Sitta sinensis,* J. V., *Siphia Hodgsonii,* J. V., *Merula Gouldii,* J. V., *Turdus auritus,* J. V., *Trochalopteron*

formosum, J.V., *Tr. Ellioti*, J.V., *Tr. Blythii*, J.V., *Yanthocincla Arthemisiæ*, A.D., *Yanth. maxima*, J.V., *Yanth. lunulata*,, J.V., *Pterorhinus lanceolatus*, J.V., *Calliope pectardens*, A.D. (obs.), *Pnoepyga troglodytoïdes*, J.V., *Lusciniopsis brevipennis*, J.V., *Arundinax Davidi*, J.V., *Phyllopneuste trinotaria*, A.D., *Oropneuste acanthizoides*, J.V., *Or. affinis*, J.V., *Minla Jerdoni*, J.V., *Siva ruficapilla*, J.V., *S. Cinereiceps*, J.V., *S. striaticollis*, J.V., *Proparus Swinhoei*, J.V., *Mecistura fuliginosa*, J.V., *Allotrius pallidus*, A.D., *Alcippe cinerea*, A.D., *Alc. pocilotis*, J.V., *Accentor multistriatus*, A.D., *Yuhina diademata*, J.V., *Paradoxornis guttaticollis*, A.D., *Cholornis paradoxa*, J.V., *Suthora Alphonsiana*, J.V., *Sut. conspicillata*, A.D., *Sut. gularis*, J.V., *Carpodacus trifasciatus*, J.V., *Carp. vinaceus*, J.V., *Carp. Edwardsii*, J.V., *Carp. verreauxii*, A.D., *Carp. grandis*, A.D., *Tetraophasis obscurus*, J.V., *Crossoptilon corulescens*, A.D.

Il faut dire quelque chose sur l'*habitat* des magnifiques phasianides, dont la Chine offre une si riche collection.

Nos montagnes du nord possèdent les *Phasianus reevesii*, Gr. et *torquatus*, Pall., le *Crossoptilon mantchuricum*, Sw. et le *Pucrasia xanthospila*, Gr. Au Setchuan, le *faisan doré* abonde dans les montagnes du nord, de même qu'au sud du Yangtzekiang; le *Phasianus Amherstio* remplace ce dernier dans les régions boisées et élevées du pays des *Man-ze*. Le *faisan sans collier*, que M. Swinhoe a nommé *Ph. decollatus*, et que j'avais auparavant signalé au Muséum de Paris où il fut désigné sous le nom de *Ph. ambiguus*, J.V. remplace le faisan à collier dans toutes les provinces de l'ouest. Le *faisan vénéré* se retrouve aussi au Setchuan, de même que l'*Eulophe* de Pékin. Mon nouveau et magnifique *Crossoptilon corulescens* (qui peut-être est le même oiseau que Pallas avait nommé *Phasianus auritus*, et que personne n'avait rencontré depuis ce grand naturaliste) vit dans les grandes montagnes boisées du Kokonor et voisinage; tandis que le *Cross. Drouyni* au plumage argenté, n'a été rencontré par moi que dans les *pays barbares* plus rapprochés du Thibet. Le resplendissant *Lophophorus L'huysii*, J.V., habite les plus grandes hauteurs; et moi-même j'ai tué ce superbe gallinacé entre douze et quinze mille pieds d'altitude, au-dessus de la région des bois, dans ces humides prairies où il vit surtout de racines succulentes. Le *Tetraophasis obscurus*, J.V., et l'*Ithaginis Geoffroyi*, J.V., ne quittent pas les grandes forêts les plus solitaires et élevées. Le *Ceriornis Temminckii*, ou Tragopan rouge, est abondant dans toutes les

montagnes boisées, dont il affectionne la lisière: ce bel oiseau, aussi bon qu'il est bien orné, porte chez les Chinois beaucoup de noms: *poule qui vomit la soie, poule cornue, poule étoilée*, etc. Quant au rare *Tragopan de Cabot*, je ne sais pas encore quel coin de la Chine récèle ce mystérieux oiseau; nulle part, non plus, je n'ai rencontré le faisan argenté au sud-ouest. Monseigneur Chauveau, qui réside à Ta-tsien-lou, indique dans ses lettres quelques autres faisans.....Jusqu'à preuve du contraire, j'incline à penser que la Chine occidentale et le Thibet oriental ne nourrissent que les espèces que je viens de nommer: la différence des noms populaires n'indique pas toujours des espèces diverses.

Dans une visite que, en Avril dernier, j'ai fait à M. Swinhoe, Consul d'Angleterre à Ningpo, cet ornithologiste si distingué m'a montré deux phasianides nouveaux qu'il venait de recevoir des montagnes du Tchékiang. Il les a nommés: *Phasianus Ellioti*, et *Pucrasia Darwini*. Comment deux gallinacés si remarquables sont-ils restés inconnus dans un pays tant fréquenté des Européens?

MAMMIFÈRES.—Mon journal du voyage de 1866, comptait, dans le nord de la Chine, soixante espèces de mammifères, plus ou moins bien nommés; y compris les animaux domestiques. Je dois dire ici, de même que pour les oiseaux, que mes recherches ultérieures, et surtout mon excursion au Setchuan occidental, ont à peu près doublé ce nombre. Et il y en a une *cinquantaine* qui constituent des espèces nouvelles pour la science.

À cause de l'importance de ces animaux, je vais inscrire ici les noms de tous les mammifères *sauvages* que je connais dans la partie de la Chine qui est au nord du Yangtzekiang, avec les noms des lieux où je les ai rencontrés.

Quadrumanes—

1 Macacus tcheliensis, A. M. Edw. (Tchély au Tong-lin).
2 Macacus thibetanus, A. M. Edw. (Moupin).
3 Macacus lasiotis, Gr. (Setchuan).
4 Macacus *hoanghoou*, A. D. (Setchuan Sept.)
5 Rhinopithecus Roxellana, A. M. Edw. (Moupin, Kokonor).

Cheiroptères—

6 Vespertilio Davidi, Peters (Pékin au Si-shan).
7 Vesperus scrotinus, Schr. (Pékin).
8-12 (et cinq autres chauves-souris, encore à l'étude).

Carnassiers—

13 Felis tigris, L. (Pékin, Mongolie, Moupin).
14 Felis pardus, L. (Pékin, Mongolie, Setchuan).
15 Felis irbis, Pall. (Mongolie, Mantchourie).
16 Felis macrocelis, Temm. (Moupin).
17 Felis nigra, A. M. Edw. (Mantchourie).
18 Felis Chinensis, Gr. (Setchuan).
19 Felis tristis, A. M. Edw. (Tchély?).
20 Felis microtis, A. M. Edw., (Pékin, au Si-shan).
21 Felis scripta, A. M. Edw. (Moupin).
22 Felis manul, Pall. (Mongolie).
23 Canis lupus, L. (partout, rare à Moupin).
24 Canis rutilus, Pall. (Si-wan).
25 Canis vulpes, L. (*passim*).
26 Canis *houly* — ? (renard grisâtre de Moupin).
27 Canis corsac, Pall. (Suenhoafou, Mongolie).
28 Canis procyonoides, Temm. (Tchély oriental).
29 Ursus thibetanus, Cuv. (Moupin, Setchuan).
30 Ursus piscator, Puch.? (Tchély).
31 Ailuropus melanolencus, A. D. (Moupin et Kokonor).
32 Ailurus fulgens, Gr. (Moupin).
33 Meles leptorhinchus, A. M. Edw. (Tchély).
34 Meles (arctonyx) leucolomus, A. M. Edw. (Tchély).
35 Meles (arctonyx) obscurus, A. M. Edw. (Setchuan occ.)
36 Helictis moschata, Gr. (Setchuan).
37 Paguna larvata, Gr. (Setchuan, Moupin).
38 Paguna — ? rayé. (Tatsienlou) (vu).
39 Viverra zivetta, L. (Moupin, Setchuan).
40 Lutra sinensis, Gr. (Moupin).
41 Lutra — sp? (Tientsin).
42 Martes flavigula, Bodd. (Moupin, Setchuan).
43 Martes foina, L. (Tchély).
44 Martes vulgaris, Var. *coreanus* (Leao-tong).
45 Putorius sibiricus, Pall. (Mongolie, Tchély).
46 Putorius Fontanieri, A. M. Edw. (Tchély).
47 Putorius Davidi, A.M.Edw. (bassin du Yangtzekiang central)
48 Putorius astutus, A.M.Edw. (trés-haute montagne de Moupin).
49 Putorius moupinensis, A. M. Edw. (Setchuan, Moupin).

Insectivores—

50 Erinaceus dealbatus, Sw. (Pékin).

51 Nectogale elegans, A. M. Edw. (Moupin, ruisseaux).
52 Anourosorex squamipes, A. M. Edw. (Moupin, Setchuan).
53 Scaptochirus moschatus, A. M. Edw. (Tchély, Mongolie).
54 Talpa longirostris, A. M. Edw. (Setchuan, Moupin).
55 Urotrichus thibetanus, A. M. Edw. (Moupin).
56 Genre nouveau — ? (Kokonor).
57 Sorex — ? (Moupin).
58 Sorex — ? (Setchuan).

Rongeurs—

59 Hystrix subcristata? Sw. (Setchuan).
60 Arctomys robustus, A. M. Edw. (Moupin et Kokonor).
61 Rhizomys vestitus, A. M. Edw. (Setchuan septentrional).
62 Siphneus psilurus, A. M. Edw. (Tchély).
63 Siphneus Fontanieri, A. M. Edw. (*Si-wan*, en Mongolie).
64 Siphneus Armandi, A. M. Edw. (*Si-in-ze*, en Mongolie).
65 Lepus tolaï, Pall. (Mongolie, tout le Tchély).
66 Lepus sinensis, L. (Setchuan, très-rare à Moupin).
67 Lepus variabilis, L. (Mongolie orientale).
68 Lagomys thibetanus, A. M. Edw. (Moupin).
69 Dipus annulatus, A. M. Edw. (Mongolie, Tchély).
70 Gerbillus psammophilus, A. M. Edw. (Mongolie, Tchély).
71 Gerbillus unguiculatus, A. M. Edw. (Mongolie, Tchély).
72 Spermolegus mongolicus, A. M. Edw. (Mongolie, Tchély).
73 Pteromys alborufus, A. M. Edw. (Moupin).
74 Pteromys melanopterus, A. M. Edw. (Moupin, Setchuan).
75 Pteromys Xanthipes, A. M. Edw. (Tchély septentrional).
76 Pteromys cinereus, A. D. (Kokonor).
77 Sciurus vulgaris, L. *var. nigra*, (Tchély et Mantchourie).
78 Sciurus Pernyi, A. M. Edw. (Moupin).
79 Sciurus Davidi, A. M. Edw. (montagnes de Pékin).
80 Sciurus Mac-lellandi, Horsf? (Moupin Kokonor).
81 Sciurus (Tamia) striatus, Pall. (Mongolie, Tchély).
82 Cricetulus griseus, A. M. Edw. (Tchély).
83 Cricetulus obscurus, A. M. Edw. (Mongolie).
84 Cricetulus longicaudatus, A. M. Edw. (Sartchy en Mongolie).
85 Arvicola mandarinus, A. M. Edw. (Mongolie).
86 Arvicola thibetanus, A. M. Edw. (tout noir, à Moupin).
87 Mus humiliatus, A. M. Edw. (Pékin).
88 Mus plumbeus, A. M. Edw. (Suenhoafou et Mongolie).
89 Mus musculus, L. (Pékin).

90 Mus minutus? Pallas (Pékin).
91 Mus flavipectus, A. M. Edw. (bassin du Yangtzé).
92 Mus decumanus, L. (Yangtzé).
93 Mus ouangthomo, A. M. Edw. (Yangtzé).
94 Mus griseipectus, A. M. Edw. (Moupin).
95 Mus Confucianus, A. M. Edw. (Moupin, Setchuan).
96 Mus Chevrieri, A. M. Edw. (Moupin).
97 Mus pygmæus, A. M. Edw. (Moupin).

Edentés—

98 Manis Dalmanni, Sund? (Setchuan septentrional).

Pachydermes—

99 Sus aper, L. (Tchély).
100 Sus moupinensis, A. M. Edw. (Moupin).
101 Equus hemionus, Pall. (Mongolie).

Ruminants—

102 Budorcas taxicolor, Hodgs. (Moupin, Kokonor).
103 Antilope gutturosa, Pall. (Mongolie).
104 Antilope (nemorhedus) Edwarsii, A.D. (Moupin, Setchuan).
105 Antilope (nemorhedus) griseus, A.M.Edw. (Moupin, Kokonor)
106 Antilope (nemorhedus) caudatus A. M. Edw. (Pékin).
107 Ovis argali, Pall. (Mongolie).
108 Ovis naghor? Hodgs. (Moupin et Kokonor).
109 Moschus moschiferus, L. *var.* 1ª *sibiricus* (Tchély occidental).
2ª *chrysogaster* (Moupin).
3ª *bucogaster* (Setchuan).

NOTA.—M. Swinhoe a fait dernièrement connaitre un cervide à forme de *Musc*, qui vit dans les îlots du bas Yangtzekiang, sous le nom d'*Hydropotes inermis:* c'est l'animal qu'on vend sur le marché de Shanghaï. D'exacts renseignements m'indiquent en Corée un animal de ce curieux genre, qui doit apparemment constituer une seconde espèce, et qui naturellement porterait le nom d'*Hydropotes coreanus.*

110 Cervulus lacrymans, A. M. Edw. (Moupin, Setchuan).
111 Cervulus (Elaphodus) cephalophus, A. M. Edw. (Moupin).
112 Cervus pygargus, Pall. (Tchély).
113 Cervus Xanthopygus, A. M. Edw. (Tchély, Mongolie).
114 Cervus mantchuricus, Sw. (Mantchourie).

115 Cervus mandarinus, A. M. Edw. (Pékin, au Haé-zze, Mantchourie).
116 Cervus affinis? (Moupin, Thibet).
117 Cervus hippelaphus? (Moupin).
118 Elaphurus Davidianus, Milne-Edw. (Pékin, au Haé-zze).

Cette simple nomenclature vant plus, pour les naturalistes, que tous mes raisonnements. Seulement j'ajouterai que, parmi ces mammifères, ceux qui forment mes nouveautés les plus remarquables sont: *Ailuropus melanoleucus*, sorte d'ours noir et blanc, qui réunit les caractères les plus particuliers, et qui habite les forêts les plus élevées; *Rhinopithecus Roxellana*, singe robuste, à face verte et au nez retroussé, ayant une longue queue et portant sur le dos de très-longs poils bruns et dorés: il vit, avec le *Macaque thibétain*, dans les froides montagnes des pays *Man-zze*. Je cite encore les Insectivores *Nectogale elegans*, et *Anourosorex squamipes*, de Moupin, comme constituant deux autres genres nouveaux fort curieux. Dans les cervides, l'*Elaphodus cephalophus* et le déjà célèbre *Elaphurus Davidianus*, forment deux sous-genres intéressants. L'existence dans l'Empire chinois du *Budorcas*, ce bœuf sauvage à chaufrein arqué et à queue très-courte, mérite encore l'attention des naturalistes: peut-être mon animal doit-il faire une espèce distincte du *Budorcas* de l'Himalaya? C'est encore un fait notable que la présence de *trois* nouvelles espèces de *Siphneus*, sorte de gros *rats-taupes*, aux ongles longs et robustes, dans un espace resserré du nord de la Chine: auparavant on ne connaissait de ce genre qu'une seule espèce, propre à la Sibérie, découverte par Pallas.

Je mets ici fin à cet aperçu sur l'histoire naturelle du nord de la Chine et du centre-ouest. Vous m'aviez demandé, mon cher et estimé Monsieur ——, un écrit d'une quarantaine de pages: les voilà, je crois, à peu près! Je vous avouerai que, depuis huit ou dix jours, j'ai consacré tout mon temps libre à l'écrire et à le transcrire d'une manière lisible. Mais, je serai suffisamment récompensé de ma peine si ce petit travail peut vous être agréable, à vous et à ceux de vos amis qui prennent intérêt aux sciences d'observation.

ARTICLE XI.

CHINESE USE OF SHAD IN CONSUMPTION AND IODINE PLANTS IN SCROFULA.*

By D. J. MACGOWAN, Esq., M. D.

HOW mankind in widely separated portions of the globe were led to independent and identical discoveries in materia medica,—to learn that certain non-alimentary substances should be adopted to cure certain maladies, is a question which medical philosophy has hitherto failed to elucidate. Waiving the discussion of this interesting subject, this brief note is restricted to the presentation of two facts which the inquiry has elicited.

Two of the most important additions that have been recently made to our materia medica were derived from "folk lore;" coastlanders of the Baltic discovered the efficacy of cod-liver oil in strumous complaints, and mountaineers of regions adjacent to the Mediterranean discovered the efficacy of burnt sponge in goitre, and analogous discoveries were made in remote times by the Chinese. We learn from Chinese medical writings that shad, particularly shad oil, is efficacious in the treatment of consumption, and that seaweed is serviceable in goitre.

Besides shad, several other oleaginous fish are considered as peculiarly adapted to consumptive patients. The barbel is commended in that disease, fattenning the patient and imparting glossiness to the skin. The bream is useful in emaciation. The gurnard is extolled as useful in phthisis. The eel is also named as useful in that malady. Anthelmintic properties (one of the qualities of cod-liver oil) are attributed to the eel, and the mullet, which is styled the precursor of the shad.

* Read before the Society June 12th, 1872.

The shad of China appears to be identical with the *clupea* of the American Coast. In Canton colloquial it is called the 三鱹 *sam-lai*, and is known to foreigners by that name. In this part of China it is called the 鰣魚 *sz'-ng*, *shi-yü* or periodical fish. It enters the Yangtze and adjacent waters in May and is in season for about 16 weeks. According to the *Puntsau* it ascends to the upper Yangtze, and what is remarkable, this wholesome and luscious fish is there called pestilence fish from its deleterious properties. On the Potomac, shad which are caught high up that river are esteemed better than those that are taken below the falls. It has been supposed that only the most vigorous and therefore the most luscious are able to make that ascent. Perhaps their long journey up the Yangtze renders them enfeebled and diseased.

The *Puntsau* says shad should neither be boiled, stewed nor fried, its flavor and nutricious qualities being best preserved by steaming, which is recommended to be done with savory vegetables. The inconvenience of the bones is lessened by cooking the fish in transverse slices. The shad caught earliest in the season command fabulous prices, and high officials are supposed to have the first claim for the luxury on each recurring season. It is named an article of tribute to the Emperor.

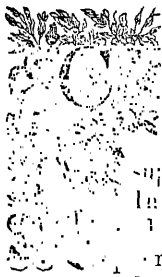
Besides its use in consumption there is a long list of maladies, similar to those in which we administer cod-liver oil, for which it is commended by the *Puntsau*. Doubtless the alterative or stimulant properties which the Chinese have found to exist in shad are due to its oleaginous portion. Probably on analyzing, it would be found to contain gaduin, or a closely analogous substance, and most of the twenty-three substances which De Jongh enumerates as composing *oleum morrhuae*.

As the Chinese found shad to be useful in the same class of diseases in which we employ cod-liver oil, so they have discovered that various fuci are efficacious in goitre, glandular swellings of a scrofulous character, and cutaneous eruptions. Those seaweeds which are known to be richest in iodine are most valued. Whole cargoes of *Laminaria*, chiefly *L. digitati* are frequently imported from Japan into this port for consumption in the interior. There is a popular belief in those regions where mineral coal is employed for fuel, that seaweed is indispensable as a corrective against the fumes of coal fires.

ARTICLE XII.

ON THE "MUTTON WINE" OF THE MONGOLS AND ANALOGOUS PEPARATIONS OF THE CHINESE.*

By Dr. MACGOWAN.



CHINESE medical writers make little distinction between their Materia Medica and Materia Alimentaria. The *Puntsau* ascribes therapeutic properties to all articles that are used as food. Nearly all portions of animals, the human frame included, are supposed to be efficacious in the treatment of disease. In their preparation they are for the most part subjected merely to ordinary culinary treatment. The exceptions consist of animal substances which are macerated in fermented or distilled liquors. To these they apply the term *chiu*, commonly rendered wine by sinologues. Hence we find in the *Puntsau*, mutton wine, dog wine, deer wine, deer horn wine, tiger bone wine, black snake wine, flowery snake wine, *ki* snake wine and tortoise wine.

Alcohol is designated in the *Puntsau* as Ah-lih-kih, which indicates the Arabian origin in China of the art of distillation. It is seldom used as a pharmaceutic menstruum, their distilled *chiu* being employed as a solvent for articles used as medicines.

These animalized liquors, if that term be allowable, are for the most part extemporaneously prepared, a few only are to be had in apothecary shops ready made; such are several kinds of snake wines. Snake wines are used in palsy. In Kwangsi the fermenting agent is a species of wild grass. The snake thus employed appears to be peculiar to the mountains of that province. To assure purchasers that the article is genuine, a strip of the skin of the animal is fastened to the top of the containing vessel. This wine is in high esteem as an anthelmintic, and an antidote to malaria. Wuhu on the Yangtsze produces a snake wine which is in high repute. An adder wine is used in paralysis and insanity. There is a long edible snake, spoken of as found in Kiangsi, which being dried and smoked is pared off in thin slices, like smoked beef and is found a convenient condiment by travellers.

* Read before the Society March 23rd, 1872.

The wine in which tortoise has been macerated is described as useful in chronic bronchitis. Cases of ten and twenty years standing have, says the *Puntsau*, yielded to this remedy.

Dog wine is described as very heating and stimulating.

The officinal mutton wine of the Pharmacopœia is in fact made of goat's flesh; the goat and sheep being often confounded, the latter animal does not appear to have been known to the ancient Chinese.

Various species of sheep are described in the *Puntsau*, or Chinese Pharmacopœia, that are not recommended for macerating in wine. Among these is the great tailed sheep of the Kwanlun mountains, the caudal extremities of which are stated to weigh thirty pounds, rendering locomotion difficult. It is added that these adipose tumors require to be removed annually, else the animal will die. Their tails are cut open, the fat cut out, when the edges are brought together by a suture.

Sheep and goat wines are directed to be prepared in the following manner:—Take ten catties of soaked rice, seven catties of goat or sheep flesh, fourteen onions, one Shantung cabbage and a catty of almond kernels. Mix them well together, and let the mixture stand and brew without malt for ten days, at the end of which time a small quantity of liquor is produced; it is a sweet and unctuous liquor, or mutton wine.

This is the formula adopted in the preparation of all the animal liquors above named.

Mutton or goat wine is a great restorer of the constitution, it strengthens the stomach, the kidneys and testes.

Having many years ago met with a jar of mutton wine which its owner, a Mongolian mandarin, greatly prized, I instituted inquiries respecting its mode of preparation and uses among the nomads of the North, but without success until a few months ago, when the Rev. J. Gilmour, in response to a request that I made him, courteously undertook the investigation of the matter, and was at the pains to have the article, a specimen of which I lay before you, prepared under his own supervision.

"The following were the ingredients:—1 sheep, 40 catties of cow's milk whiskey, 1 pint of skim milk, soured and curdled, 8 ounces of brown sugar, 4 ounces of honey, 4 ounces of fruit of dimocarpus, 1 catty of raisins, and a half a dozen drugs weighing in all about one catty. The sheep must be two years old, neither more nor less, a male, castrated.

Plant necessary for distillation.—1 large pot (cast iron), 1 wooden* half-barrel opened at bottom, 1 smaller pot (cast iron), 1 earthenware jar, felt belts, cow dung, fire.

Process.—Set the *boorher* on the large pot, calk the joining first with paper, then daub the outside with cow dung and ashes. Make the *boorher* air-tight by plastering it all over outside with cow dung.

Pour in the wine, add half the raisins (*i. e.* 8 oz.) cut or crushed, half the black sugar, the pint of airik, and the bones of the sheep's legs from the knee downwards after breaking them open.

From the other bones strip all the fat and most of the flesh, leaving them fleshy. Hang them head and all inside the *boorher* high enough to be beyond the reach of the whisky, and low enough to be out of reach of the pot above. Break up the medicines into small pieces (do not pound them) and put them into the earthenware pot. Into that pot put also the honey, white sugar, dragon's eye and the remaining half of the black sugar and raisins. Suspend the earthenware pot in the centre of the *boorher*, put on the pot above, make the joining air-tight by paper, cloth and felt bands. Apply fire to the great pot. When the upper pot feels warm to the touch, fill it with cold water and stir it. When the water becomes too hot to touch, ladle it out and fill up with cold water. When this second potful of water becomes too hot for the hand, slacken the fire, take off the upper pot, and the earthenware pot will be seen full of a dirty brown liquor boiling furiously. Take out the earthenware pot, pour off the liquid, replace the earthenware pot, replace the upper pot, fill with cold water. When this potful of water becomes hot, the whole thing is over. The earthenware pot is again about half filled, pour it off and let it cool. When reasonably cold put it up in jars and close them with the membrane of ox or sheep bladders.

Remarks.—The great bulk of the flesh of the sheep is not used, nor any of the fat. All the marrow bones are broken open. The skull is not broken open nor the toungue extracted from the head. At the end of the process the mutton on the bones is cooked, but tastes badly. The *hoieu nood* (dragon's eye) which was put in black comes out white. The quantity of cow's milk wine in the

* This is about 2 feet high (English): tapers. At the bottom it is large enough to sit on the rim of the big pot; at the top it is small enough to let the small pot sit in it without falling through. It is called *Boorher*.

pot is not much diminished, but the strength is gone and what remains is good for throwing away only.

Time of making.—It should not be made before the seventh or eighth Chinese month. This was made on the 12th of the 9th month. It should not be used before the 11th or 12th Chinese month. None but aged people should drink it. It may be taken daily in one, two or three small Chinese wine cupfuls till finished. The first winter the patient uses it, not more than 2 or 3 catties should be drunk. If found to agree with the patient and if taken a second winter a catty more may be taken. If taken a third winter another catty may be added, *i. e.*—First winter $2\frac{1}{2}$, second $3\frac{1}{2}$, third $4\frac{1}{2}$ catties. If kept till spring, it becomes useless if not dangerous. Many people use it (I am told), but few take it more than one winter. Its use is (seemingly) to repair any manifestation of weakness arising from old age.

Case.—My teacher (Mahabul) when 50 years old was afflicted with a shaking of the head from right to left. He drank 2 or 3 catties of mutton wine in the dead of winter, recovered and is now all right.*"

The liquor thus prepared, has, you will observe, a very strong odour of mutton, it is sweetish and unctuous. Specific gravity 0.98873. Alcohol per cent. 9.14.

* Translation of a Mongolian prescription drawn up by the Lama who furnished the medicines.

"*Jadae haeshae*, good for inside and outside HEE (colic?). *Wangluk, Neeshing*, Ramnee,—these three are strengthening. *Ga*, good for the stomach. Honey 4 oz. White sugar 1 oz. Dragon's eye 4 oz. Black sugar 8 oz. Raisins 1 catty.

"Take the mutton from the bones, leaving a little on them; break all the marrow bones and distil. Too much mutton spoils the taste and the nature of the wine. Too much fat won't do. If the proportion of drugs be larger than this it won't agree. Indeed this *Bawry Daruss* at first must be taken in small quantities. After having taken it in small quantities during one winter, should it agree (with the patient), it may be taken another winter. It won't do at all in the hot season."

[*Inside* HEE is wind ascending and descending, evidently colic; what outside *hee* is I can't discover. It fixes on the skin! After pursuing my teacher over the verge of his knowledge, the old man admitted he had never seen *outside hee*, though he had often suffered from *inside hee*.]

ARTICLE XIII.

RETROSPECT OF EVENTS IN CHINA, &c. DURING THE YEARS 1871 AND 1872.

1871

IN happy contrast to the record of the preceding year the retrospect of 1871 presents no event of conspicuous importance to China, either in her internal or external relations. The agitation against foreigners in general, and missionaries in particular which culminated so tragically in June 1870 reappeared in a mild form at various places, and continued to smoulder during 1871, but without leading to violence or outbreak. Symptoms of disquiet in the country have not been wanting, but this may be presumed to be a chronic state of affairs, only brought more prominently to the notice of foreigners of late by the extended means of observation available to them. From Newchwang and Swatow lawless acts have been reported, and insurrection was threatened in Honan; but the most formidable rising against the constituted authorities was probably that noticed by Mr. White, Commissioner of Customs at Ningpo, which occurred on the borders of Chekiang and Anhwei provinces, and in which were implicated 10,000 disbanded braves to whom grants of land had been given in the districts depopulated by the Taiping Rebellion. This disturbance was put down without difficulty.

The success of the Imperial Arms in quelling the Mahomedan insurrection in Kansuh and in subjugating the Miautze in Kweichow have been uninterrupted if not brilliant; and the authority of the government has been asserted with effect among the turbulent tribes of Kwangtung and Fokien. In the revolted province of Yunnan, however, no progress seems to have been made by either belligerent. The occupation by the Russians of the town and fortress of Kuldja in Chinese Turkestan definitively cuts off an extensive region from allegiance to the Emperor of China.

The recovery of the central and eastern parts of China from the effects of the Taiping devastations has progressed satisfactorily during the year, and improvement is to be noted in the condition of the agricultural, industrial, and to some extent also of the commercial classes throughout the country, except in districts that have been overtaken by natural calamity. Unhappily the exceptions under this head are of great magnitude. Inundations on a small scale have been reported in Liautung and in Kwangtung; but in the province of Chihli extensive tracts have been laid permanently under water, the means of drainage being wholly insufficient to draw off the body of water that has escaped from the canals and rivers and overflowed the plain. Mr. Commissioner Hannen of Tientsin reports 45 rainy days in the months of July, August and September and adds that "it never rained in anything but the steadiest and most determined downpour," resulting in the bursting of the embankments of the Grand Canal, the Yung-ting-ho, Si-ho, and other rivers. In the Tientsin "Foo" 200 villages with a population estimated at 80,000 were reported to be flooded in October; and there were three other Foos within the area of the inundated country, viz: Pao-ting (the provincial capital) Shun-tien (Peking) and Ho-chien. The extent of country more or less under water is estimated by Mr. Hannen at 1,000 *li* from north to south, and 600 *li* from east to west. It would be impossible to obtain any accurate idea of the destruction of life and the means of living by these vast inundations, but unquestionably the sufferings of the people have been most severe.

In the south of China a scarcity, amounting to famine, was felt towards the close of the year, but thanks to the telegraph, the large available fleet of ocean going steamers in the Chinese waters, efficient commercial machinery generally, and an enlightened policy on the part of the Chinese government which permits the exportation of grain from one province to another, the demands of Kwangtung were promptly supplied.

The gratuitous distribution of Mulberry trees among the people of Kiangsu with a view to the extension of sericiculture in the province has attracted honorable notice to the late Taoutae of Chinkiang (Shên); and among the other improvements of the year must be ranked the increase in Tea cultivation in the island of Formosa where the article now takes rank as a constituent of the export trade.

The traffic in Chinese Coolies has continued to flourish at Macao, and two deplorable casualties have resulted from it this year—one the murder of the Captain and crew of the French ship *Nouvelle Penelope* by the coolies who constituted her cargo, the other the burning of the *Dolores Ugarte* close to Hongkong, which was attributed to the emigrants on board of her.

Rapid advances have continued to be made by the Chinese government in the creation of coast defences. The arming of the Taku forts with the most powerful modern artillery has especially attracted the attention of foreigners; and the growth of an efficient native-built and native-manned and officered steam navy has excited much admiration. The arsenals at Shanghai, Nankin and Foochow have been kept going with unflagging zeal, and have now been brought to a high pitch of efficiency both in the casting of heavy guns and in the construction of ships with all their engines and equipment.

In her foreign relations China achieved a decided diplomatic success in the official reception by the President of the French Republic of His Excellency Chung-How, who was despatched to France on a special mission in connexion with the Tientsin Massacre. In view of the so-called "Audience Question" which looms over foreign relations with the Chinese Court and constitutes the coming diplomatic "difficulty" at Peking it was expected in some quarters that advantage would be taken by the French government of the Mission of Chung-How to obtain a proper reception of the French Minister at Peking as a condition of granting the like privilege to the Chinese Envoy at Versailles. M. Thiers however received Chung-How unconditionally, leaving the Ministers in China to fight the audience question on its own merits and on their own resources.

A Treaty of Peace and Commerce was signed, at Tientsin, between Prince Date representing the Mikado of Japan and Li Hung-chang representing the Emperor of China, in October 1871.

H. E. Tsêng Kwo-fan, Vice-Roy of the Liang Kiang, visited Shanghae on 29th November.

Telegraphic communication between Shanghae and Hongkong was established on April 18th, and the line from Hongkong to Singapore was opened on June 3rd thus completing the communication between China and the Western World. The lines have worked with fair success during the year, and the coast cables to Hongkong and Nagasaki have been extensively made use of by Chinese merchants.

In accordance with a programme originating with the Consul-General in Shanghae in 1868, an American Naval Expedition was despatched to Corea in the summer of this year under the direction of the Hon. F. F. Low, U. S. Minister in China, and under the immediate command of Admiral Rodgers. The object of the expedition was to enquire into the fate of the crew of the schooner *General Sherman*, which vessel was destroyed in Corea in 1866, and to take advantage of the opportunity to conclude a Treaty of Commerce with the Corean government, or if that were found impracticable, to obtain a Treaty for the protection of vessels and their crews cast on the Corean shores by stress of weather. The Coreans however resisted the approach of the Americans, and after capturing several batteries and a strongly garrisoned citadel in front of the town of Kang-hoa, Admiral Rodgers found his forces inadequate to follow up these successes, and the squadron shortly afterwards withdrew from Corea without having achieved any of the results hoped for. A haughty defiance was the only reply vouchsafed by the Regent of Corea alike to the friendly overtures of Mr. Low, and the ruder appeals of the Admiral.

1872

NOTWITHSTANDING the efforts of the authorities to mitigate the sufferings of the population, great distress existed during the winter of 1871-72 in the flooded districts of Chihli. His Excellency Li-hung-chang, Vice-Roy and Governor-General of the province early in the year drew the attention of the Supreme government to the fact that the breaches in the embankments of the canals and rivers were due to the misappropriation of the funds annually set apart for their conservation; and almost simultaneously an Imperial Edict appeared ordering a tablet to be placed in the temple of Ta-wang at Tientsin in honour of the River-God who, during the floods, had been worshipped in the form of a snake, and by whose timely interposition the deluge was stayed. The breaches in the embankments had been repaired under the supervision of the Vice-Roy, at a cost estimated by himself at 295,000 taels. On the 12th August Li reported the completion of the works, and submitted a detailed account of what had been done, with the amount of money expended. At the same time Li,

by way of assuring their Majesties that a period of agricultural prosperity was to follow the recent floods, forwarded a Memorial reporting the discovery in more than one district in the province of double-headed wheat stalks, a phenomenon of happy augury. Unfortunately, however, for the success of Li-hung-chang's congratulations this Memorial had scarcely appeared in the Gazette, when the newly repaired embankments of the Yung-ting-ho, the Peiho and the Imperial Canal again gave way, and before the waters which flooded the plains in 1871 had been drawn off, the country was once more submerged. Out of the 144 hsien in the province of Chihli we learn from the interesting reports of Mr. Commissioner Hannen that the population of 57 were sufficiently impoverished by these fresh floods to warrant the remission of taxes in their favour; and the country in the vicinity of Tientsin is described as presenting the aspect of a sea, traversed by sailing boats. On this disastrous state of things being revealed Li-hung-chang was assailed with caustic reproaches by one of the Censors, Pe-pau-dsze, and the Emperor ordered the names of the Mandarins recommended by Li to be struck off the list for promotion. Up to the end of 1872 the waters still cover the land, and over a larger tract of country than in the preceding year.

It has been noted that the four seasons never pass without the occurrence of famine either in one part of China or another. In the present year the most urgent complaint under this head comes from the fertile and prosperous province of Szechuen. Owing, we are told, to a dry summer, a wet autumn and a continuous downpour of rain in the succeeding spring, the scarcity of food was so severely felt that the Vice-Roy of that province solicited the Imperial sanction to a remission of Li-kin taxes to the amount of 200,000 taels. A cry of distress comes likewise from Yunnan, the eastern and southern portions of which province claim to be still under Imperial rule. The sinews of war have failed in that quarter, for the Li-kin tax produces nothing, trade being extinct, and "the roads overgrown with thorns;" and the army of Yunnan has had to depend on contributions from more prosperous provinces. These contributions, however, by reason of the remoteness of the region to be supplied have failed to reach the theatre of war. One of the Censors therefore urges on the Imperial government, as a means of replenishing the exhausted military chest of Yunnan, the re-opening of the Copper mines and Salt pits in the province. The arrears of remittances due to Yunnan by other provinces

would, he submits, be the legitimate source whence to obtain the capital required to commence the works. Kwangtung alone, according to his account, owes 500,000 taels, half of which would be sufficient to set the mining works agoing. Besides supplying funds for carrying on the war against the Mahomedan insurgents, other important advantages would flow from the re-opening of the Copper mines, which are thus classified by the Censor. "The people of Yunnan are chiefly dependent on the mines for a livelihood, so that when these were closed one-half of the miners were driven by want to join the rebels. If the mines were re-opened, the miners would return to their work, and the enemy would be unable to stir up disaffection among them. Secondly, the resuscitation of the copper trade would give such an impulse to business generally that merchants and settlers would be induced to emigrate from other parts. Yunnan is so thinly populated that an influx of settlers is greatly needed. Thirdly, the government would have an abundant supply of copper for the mint. The supply has been so inadequate of late that the currency has become both debased and insufficient."—*N.-C. Herald.*

The annals of the year have not been free from the usual outbreaks of banditti and disaffected people, in various parts of the country. Rebellion simmers in Honan: a conspiracy at Soochow caused some alarm to the authorities in the early summer and "bread-riots" have occurred in some places. But the successes of the Imperial arms against the Mahomedans in the North-west and the Miautze in Kweichow have been well marked, and have again raised the prestige of the government. From the interesting reports of that distinguished explorer Baron von Richthofen, published in Shanghai in March 1872, we learn that the desultory struggle which had been kept up in Shensi from 1861 till 1870 with varying results, but in which the Imperialists were latterly being driven back was brought suddenly to a close in the spring of 1870 by the reported approach of Li-hung-chang with an army of foreign-drilled and armed troops from Wuchang. The Mahomedan rebels without waiting to exchange a shot with the new levies evacuated the provincial capital Si-gnan-fu and retreated precipitately into Kansuh, where they by last accounts occupied two strongholds Ho-chau and Lan-chau; but were being followed up by Tso-kung-pau, Governor-General of Shensi and Kansuh, and by a portion of Li's disciplined troops under the command of Tsau-chu-men.

In Kweichow the Miautze, except a few thousand occupying the inaccessible parts of the mountains, have been subdued by the forces under Tso-tao-wa, and it must be added that the Imperial officers have, as their manner is, stained their victory with treachery and with most revolting cruelties practiced on their vanquished enemies, whose crime was a gallant but unequal struggle for their independence. The latest news received from Kweichow is from a foreigner employed on General Tso's staff, and is dated Sin-chen, 9th November 1872. It reports the capitulation of the Mahomedans who held that city, and it is satisfactory to know that in this instance the honors of war were accorded to the garrison. This is said to be the last Mahomedan stronghold remaining in Kweichow, Sun-ye-foo having been surrendered in June.

The port of Kiungchow in the island of Hainan was visited by Mr. Hart, Inspector-General of Customs, about the beginning of June with a view to its being opened to foreign trade and residence under the Treaty of Tientsin. Mr. Hart was accompanied by a number of native officials, and by Mr. Henderson, Engineer-in-chief of the Customs' service, Mr. H. O. Brown, Commissioner, and Mr. Brenan of the British Consular service.

Much discussion has taken place in Shanghai on the contraction of the river channel and repeated applications have been made to the Chinese government to have the "Bar" near Woosung dredged so as to admit of the free ingress and egress of the large steamers which now perform the long sea voyages to and from the port.

Several useful additions have been made to the Chinese Steam fleet during the year, and on the 24th May the first frigate was launched from the Kaou-chang-meaou building yard. She is 263 feet long, extreme, carries 26 40-pounder rifled guns on broadside battery, with 2 90-pounder Krupp pivot guns; and has a nominal horse-power of 400. This vessel is to be followed by another of similar dimensions. The exertions of the high authorities to place the country in a state of defence against invasion by sea continue unabated. Roads for artillery have been constructed by the Vice-Roy of Chihli between Tientsin and Taku; and the ingenuity of Dr. Macartney at Nankin has placed the Chinese in possession of that formidable weapon for river defence, the torpedo.

The various independent squadrons, under the control of Vice-Roys, and belonging to the Customs' service, have since November been placed under the new dragon flag.

The "Chinese Mercantile Steam Navigation Company" has been formed under official auspices for coast service, with a special view to carrying the Tribute Rice to Tientsin. The Company has commenced its operations by purchasing some old steamers from foreigners, but some new vessels are shortly to be added.

Baron von Richthofen completed the last of his interesting journeys in the interior of China in the spring of this year. Starting from Peking in October 1871 he made a short excursion into the southern portion of Mongolia: then southwards through the province of Shansi to Tung-kwan, the celebrated fortress situated at the great bend of the Hwang-ho. Thence he travelled to Signan-fu, and through Shensi to Szechuen, intending to penetrate to Yunnan. The latter part of the programme had, however, to be abandoned; and the traveller returned to Shanghai in May, taking his final departure for Europe in October. The report of this last journey published by the Shanghai Chamber of Commerce is replete with interest and is full of important information.

Since the establishment of a kindred society in Yokohama, to say nothing of the periodical press which is there conducted with conspicuous ability, the less need is felt for this society to embrace in its retrospect events which transpire in the Japanese islands. Yet the progress of the government and people of Japan in adopting European precedents in politics, finance, religion, manners and social ethics, is too remarkable to be passed over without some notice. Within a year we have heard of several astounding changes in that country which have been effected in the most orderly manner. The persecution of Christians which was referred to in the last number of this Journal, has ceased and the victims have been reinstated. On the other hand the Buddhist religion has been disestablished if not proscribed, and the temporalities of the sect converted to the secular use of the government.

Nothing seems to be too great or too small for the Japanese Reformers; and we find prostitution and female slavery, fashions in dress, furnishing of houses, down to so apparently trivial a matter as expectoration in the streets, all summarily dealt with in the Edicts of the Mikado; and the Calendar has been assimilated to that in use among Western nations.

The Railway between Yedo and Yokohama was opened to the public by the Mikado on the 13th November and has since been working successfully.

The land lines of telegraph connecting Nagasaki and Yedo, and the open ports of Japan with the general sub-marine system of the world have been completed some time, but have not yet been opened for general use.

An International Exhibition was opened at Kioto in May last, which attracted many visitors, who were generally charmed with the kindly reception they met with, and with the natural attractions of the city and its environs.

Not the least note-worthy of the occurrences of the year is the attitude assumed by the Japanese government in regard to the traffic in emigrants to South America. A Coolie ship, the *Maria Luz* under Peruvian colours, and bound from Macao to Callao, put into Yokohama from stress of weather. Peru having no treaty with Japan, the government of the Mikado, prompted doubtless by their foreign advisers, assumed their full territorial rights according to the law of nations, and ordered an investigation into the terms of the contracts under which the Coolies were held to service. These contracts being pronounced invalid alike by the laws of Japan, of China and the Law of Nations, the Coolies were set at liberty by the Japanese Court; and were shortly afterwards forwarded to Shanghai and thence to their homes in Kwangtung. One of the most gratifying features in this case was the new-born interest evinced by Chinese government officials in the fate of their countrymen abroad. The bold initiative of the Japanese authorities seems to have stirred the energies of the Vice-Roy of the two Kwang at whose instance a trusty officer, Chên of the Shanghai Mixed Court, was despatched to Yokohama to watch over the liberated Coolies and to provide a passage for them to China. A precedent has thus been established which may not be unfruitful of good in the future.

The obituary of the year includes the name of the "Great Vice-Roy," Tsêng-kwo-fan, who died on the 12th March at Nankin, at the age of 65, mourned sincerely by the government to which he had rendered long and distinguished services, and by the people whom he ruled and whose affections he had won in an unusual degree. Tsêng-kwo-fan's political views were doubtless of that type which is known as "anti-foreign," but no foreigner will grudge his tribute of respect to the memory of an eminent soldier, statesman and scholar who had the good fortune to earn the gratitude of his own countrymen.

A Chinese Educational Mission to the United States has elicited some interest among foreigners, but little definitely is known of the real designs of its promoters. The "Mission" is composed of some 30 pupils under the charge of Chun-lan-pin, a native of Canton and an Under Secretary of the Board of Punishment. It left Shanghai in August for San Francisco.

The Emperor of China having attained his majority was married at Peking on October 16th to Ah-lu-te, daughter of Chung-chi, a lecturer in the academy of Han-lin and now raised to the dignity of Duke.

METEOROLOGICAL OBSERVATIONS FOR 1872.

Early in 1872 a Meteorological Committee was formed, and from the 1st of April observations have been taken under their superintendence which are being continued. We now publish them from 1st April to 31st December.

The barometer used was a Fortin's Standard of five-tenths of an inch bore, placed about 15 feet above the sea level. The maximum and minimum thermometers were hung in an open verandah facing the south, but protected by bamboo blinds from reflection of the sun's rays.

April.

Day of month.	Barometer.		Thermometer in shade.		Maximum in sun's rays.	Hygrometer 9.30 A. M.		Rain previous 24 hours inches
	9.30 A. M.	Atta. Ther.	Max.	Min.		Dry bulb.	Wet bulb.	
		°	°	°	°	°	°	
1	30.21	57	62	45	116	56	52	
2	.48	56	53	44	110	50	44	
3	.46	51	53	43	90	47	42	.03
4	.30	54½	56	43	97	50	48	.14
5	.30	56	57	53	82	53	52	.09
6	.16	57	72	55	120	58	57½	
7	29.99	63	80	54	134	70½	67	
8	30.02	70	80	59	134	72½	68	.03
9	29.92	75	83	64	135	77	72	.08
10	.78	75	82	64	137	77	72½	.72
11	30.10	67	61	57	82	57	55	.02
12	.11	62	61	53	83	56	54½	.30
13	.00	61	60	53	71	57½	57	.61
14	.33	59	55	54	104	54	52	.02
15	.47	59	58	45	122	53	49	
16	.43	60	58½	43	122	55	49	
17	.39	59	63	49	127	58	52	
18	.27	60	65	52	110	61	57	
19	.08	61	64	58	94	61	60	.15
20	.01	63	68	60	87	64	63	.60
21	29.90	66	69	63	123	67	65	1.20
22	.96	66	70	60	118	65	63	
23	.94	65	64	59	112	61½	60½	
24	.92	65	64	60	97½	63	61	.05
25	30.02	63	64	59	116	60	58½	
26	.14	65	67	56	130	64	61	.05
27	.01	66	70	58	125	66	62½	
28	29.89	67	70	64	123	69	66	
29	30.03	62	60	55	88	57	55½	.20
30	.02	62	66	55	122	58	55	.06

May.

Day of month.	Barometer.		Thermometer in shade.		Maximum in sun's rays.	Hygrometer 9.30 A. M.		Rain previous 24 hours inches
	9.30 A. M.	Atta. Ther.	Max.	Min.		Dry bulb.	Wet bulb.	
		°	°	°	°	°	°	
1	30.11	66	72	56	109	66	65	
2	.24	63	63	53	95	61	55	
3	.02	60	63	54	108	57	54	.21
4	.15	63	68	56	117	63	60	.05
5	.16	64	69	54	134	66	62	
6	.13	65	73	53	138½	73	68	
7	.05	71	81	54	138	73½	69	
8	29.93	73	79	61	137	78	68	
9	.93	71	74	64½	123	69	66	
10	30.10	70	72	64½	127	69	65	
11	.08	66	68	59	115	60	62	
12	.07	68	70	60½	124	64½	63	} .39
13	.08	67	71½	58	126	65½	58½	
14	.10	69	73	61	124½	70½	62½	
15	.00	73	77	63	142	72½	66	
16	29.86	72	78	68	138	70	67	.13
17	.98	73	83	63	134	72	65	
18	.98	70	79	63	132	70	62	
19	30.15	71	73	61	135	71	60	
20	.07	68	68	62	91	66	60	
21	.04	69	72	63	140½	67½	62	
22	.11	71	72	58	140	69	61	
23	.09	70	75	61	127	68	62	
24	.07	74	77	64	138	75	68	
25	.06	71	74	67	118	70	68	
26	.04	70	70	66	124	68	65	
27	.01	74	79	65	136	74½	68	
28	29.77	74	80	69	129	72	71	.56
29	.98	73	76	65	137	70	64	.52
30	30.03	70	73	63	133	67	61	.03
31	.05	69	68	60	118	65	60	.33

JUNE.

Day of month.	Barometer.		Thermometer in shade.		Maximum in sun's rays.	Hygrometer 9.30 A. M.		Rain previous 24 hours inches
	9.30 A. M.	Atta. Ther.	Max.	Min.		Dry bulb.	Wet bulb.	
		°	°	°	°	°	°	
1	29.95	68	68	61	93	65	63	.16
2	.94	68	70	63	99	67½	65	
3	30.00	69	72	65	101	69	67	.03
4	.05	70	71	65	87	68	66	
5	.01	70	72	65	119	67½	66	
6	29.95	71	83½	64	136	71½	68	
7	.95	72	76	64	125	72½	69	
8	.78	73	78	69	131	73	72	.35
9	.97	72	78	67	135	71½	67	
10	.94	72	76	66	105	70	68	
11	30.00	76	79	65	135	75	69	
12	.09	76	79	66	137	76	69	
13	.14	74	76	65½	137½	72	66	
14	.08	77	81½	67	136	76	70	
15	29.97	76	80	74	130	75½	74	.10
16	.97	74	75	68	132	74	70	
17	30.00	75	80	66	141	73	69	
18	.01	78	81	67	144	77	68	
19	29.87	73	72	64	82	69	68	2.32
20	.88	71	69	66½	88	68	66	1.59
21	.88	71	70½	66	89	68½	68	.20
22	.81	71	70	68	87	69	68	.69
23	.94	71	72	66	125	68½	64½	.63
24	30.02	73	77	64	136	72½	68½	
25	.02	72	76	66½	135	70	67	
26	.04	73	73	64½	131	71	64½	
27	30.00	69	69	64½	81	65	63	.26
28	29.91	70	71	63½	86	68½	67½	1.23
29	.88	71	74½	63½	106	71	69½	.35
30	.93	73	76	71	104	74	72	.02

JULY.

Day of month.	Barometer.		Thermometer in shade.		Maximum in sun's rays.	Hygrometer 9.30 A. M.		Rain previous 24 hours inches
	9.30 A. M.	Atta. Ther.	Max.	Min.		Dry bulb.	Wet bulb.	
		°	°	°	°	°	°	
1	29.94	75	79	70	129	75	74	
2	.94	81	88	70	141	81	79	
3	.91	85	93	77	148	88	79	
4	.89	87	93	79	146	90	78	
5	.85	88	93	79	147	90	78	
6	.77	87	93	80	146	89	78	
7	.72	86	93	80	139	90	78	
8	.70	86	94	81	147	87	77	•
9	.75	86	89	78	146	84	80	1.12
10	.87	86	90	80	146	85	80	
11	.89	87	94	79	143	87	81	
12	.85	89	95	80	146	90	81	
13	.82	87	95	81	147	82	79	
14	.85	90	95	84	148	91	81	
15	.89	90	96	83	148	89	81	
16	.85	88	94	80	147	87	77	
17	.82	88	93	81	144	88	78	
18	.79	89	92	81	145	90	81	
19	.92	87	90	81	145	86	81	
20	.99	86	89	79	139	85	81	.30
21	.90	86	89	79	152	86	81	
22	.89	85	89	75	143	85	79	.13
23	.90	81	85	73	137	79	75	1.30
24	.85	82	85	76	121	81	76	
25	.80	84	88	78	142	85	75	
26	.81	85	91	79	150	85	80	
27	.82	84	88	78	136	83	78	
28	.75	84	84	79	126	83	79	
29	.77	83	87	78	144	82	78	.08
30	.75	84	87	78	144	83	78	.10
31	.66	85	88	78	146	84	79	

August.

Day of month.	Barometer.		Thermometer in shade.		Maximum in sun's rays.	Hygrometer 9.30 A. M.		Rain previous 24 hours inches
	9.30 A. M.	Atta. Ther.	Max.	Min.		Dry bulb.	Wet bulb.	
		°	°	°	°	°	°	
1	29.51	82	86	77	139	81	78	.10
2	.67	83	88	77	148	82	78	.15
3	.76	84	87	78	145	83	78	
4	.80	83	85	78	142	81	76	
5	.84	82	85	73	146	81	71	
6	.85	81	84	73	139	81	71	
7	.83	79	84	76	125	78	77	.62
8	.90	83	86	76	127	82	78	.65
9	.86	83	88	78	144	83	79	
10	.72	84	80	75	107	78	76	1.24
11	.84	83	87	75	146	83	79	.99
12	.86	84	89	78	141	85	80	
13	.81	83	89	80	129	83	80	.08
14	.69	85	91	81	141	86	79	
15	.66	81	88	80	111	80	78	.05
16	.69	82	84	81	103	81	78	.35
17	.87	82	84	75	110	81	78	2.03
18	.87	82	84	78	115	82	79	3.40
19	.94	83	86	73	147	84	79	
20	30.01	85	88	78	*	83	77	
21	29.98	85	88	77		85	79	
22	.99	85	88	77		85	78	
23	.94	84	86	76		84	76	
24	.88	82	80	75		82	76	
25	.89	81	81	73		81	76	
26	.94	80	82	76		81	75	.01
27	.84	82	83	77		81	80	.20
28	.83	81	83	76		80	77	
29	.89	80	83	75		80	75	.31
30	.98	79	81	72		79	73	
31	.95	78	78	74		77	71	

* The black bulb Thermometer was this day broken by an accident.

SEPTEMBER.

Day of month.	Barometer.		Thermometer in shade.		Maximum in sun's rays.	Hygrometer 9.30 A. M.		Rain previous 24 hours inches
	9.30 A. M.	Atta. Ther.	Max.	Min.		Dry bulb.	Wet bulb.	
		°	°	°	°	°	°	
1	29.85	76	81	70		73	69	
2	30.04	80	83	70		80	70	
3	.13	80	84	71		80	71	
4	.15	80	83	72		80	71	
5	.05	81	85	71		82	75	
6	.02	84	88	74		84	77	
7	.02	83	86	74		83	75	
8	29.97	82	89	76		86	77	
9	30.01	78	80	75		76	74	.06
10	.24	75	78	70		74	65	
11	.25	77	78	65		77	65	
12	.21	77	80	67		77	66	
13	.18	78	80	69		77	69	
14	.14	77	81	67		75	69	
15	.11	75	80	67		76	70	
16	.08	77	81	68		76	70	
17	.07	76	81	66		76	68	
18	.09	75	79	65		76	65	
19	.12	77	81	68		77	68	
20	.12	76	80	67		75	67	
21	.13	76	80	67		76	68	
22	.14	76	80	67		76	68	
23	.18	76	80	66		78	68	
24	.20	74	79	66		75	67	
25	.25	75	79	68		75	68	
26	.22	75	81	69		74	69	
27	.15	75	80	68		74	68	
28	.11	74	76	68		74	66	
29	.11	73	74	68		70	67	
30	.12	72	76	64		72	62	.16

October.

Day of month.	Barometer.		Thermometer in shade.		Maximum in sun's rays.	Hygrometer 9.30 A. M.		Rain previous 24 hours inches
	9.30 A. M.	Atta. Ther.	Max.	Min.		Dry bulb.	Wet bulb.	
		°	°	°	°	°	°	
1	30.15	69	78	63		68	61	
2	.17	73	76	62		73	62	
3	.20	72	75	60		71	63	
4	.17	73	78	63		73	63	
5	.15	69	71	64		67	63	
6	.22	70	75	65		70	65	
7	.27	70	74	56		68	59	
8	.23	72	74	60		67	59	
9	.20	71	76	58		70	52	
10	.23	69	74	59		68	60	
11	.30	70	74	55		70	61	
12	.30	73	72	60		73	63	
13	.26	70	79	65		71	65	
14	.24	74	77	66		75	68	
15	.14	74	83	68		74	73	.08
16	.13	77	79	73		77	73	
17	.13	79	85	70		81	73	
18	.10	76	75	72		74	72	
19	.28	66	67	59		61	58	.14
20	.32	65	69	55		66	60	
21	.35	67	67	59		66	62	
22	.35	65	68	59		64	61	
23	.41	64	67	58		62	60	.06
24	.39	66	68	61		66	61	
25	.38	65	66	62		62	61	
26	.35	65	72	55		65	60	.12
27	.22	65	73	58		68	60	
28	.14	68	70	62		69	63	
29	.28	64	67	60		61	59	.27
30	.43	63	62	51		58	52	
31	.43	62	66	51		60	55	

NOVEMBER.

Day of month.	Barometer.		Thermometer in shade.		Maximum in sun's says.	Hygrometer 9.30 A. M.		Rain previous 24 hours inches
	9.30 A. M.	Atta. Ther.	Max.	Min.		Dry bulb.	Wet bulb.	
		°	°	°	°	°	°	
1	30.32	63	68	57		63	59	
2	.19	68	69	60		67	63	
3	.40	63	71	54		63	57	
4	.42	64	72	52		63	58	
5	.37	64	70	52		63	57	
6	.31	64	72	53		65	59	
7	.31	65	75	56		66	60	
8	.25	68	76	59		71	65	
9	.30	70	68	64		67	63	
10	.64	58	55	45		51	46	
11	.42	56	51	47		50	45	
12	.45	55	58	40		51	44	
13	.47	54	60	38		52	45	
14	.38	56	65	40		58	51	
15	.32	57	66	50		56	51	
16	.34	57	65	46		57	50	
17	.52	55	60	41		45	47	
18	.42	57	64	42		57	50	
19	.38	58	68	48		58	54	
20	.36	63	72	55		67	60	
21	.32	67	69	59		69	64	
22	.16	65	62	60		60	58	
23	.32	58	56	47		51	47	.51
24	.46	55	58	41		51	46	
25	.59	49	51	30		41	37	
26	.62	51	55	34		47	43	
27	.47	52	57	41		52	49	
28	.34	53	52	42		49	46	.15
29	.31	54	60	39		52	47	
30	.32	54	61	41		53	47	

DECEMBER.

Day of month.	Barometer.		Thermometer in shade.		Maximum in sun's rays.	Hygrometer 9.30 A. M.		Rain previous 24 hours inches
	9.30 A. M.	Atta. Ther.	Max.	Min.		Dry bulb.	Wet bulb.	
		°	°	°	°	°	°	
1	30.29	55	63	46		57	52	
2	.34	56	62	47		57	52	
3	.20	56	67	47		57	51	
4	.32	58	65	44		58	51	
5	.28	57	59	51		59	57	
6	.32	56	59	50		51	49	.57
7	.37	56	58	43		54	50	
8	.26	55	61	51		55	50	
9	.30	56	63	45		53	50	
10	.20	57	65	50		57	53	
11	.39	58	57	47		52	48	
12	.35	55	57	40		51	45	
13	.32	55	57	49		53	50	
14	.44	56	53	46		50	44	
15	.43	50	47	36		43	37	
16	.38	50	52	34		43	39	
17	.64	48	46	29		38	32	
18	.49	51	52	28		42	37	
19	.30	49	59	39		49	45	
20	.40	51	58	38		51	47	
21	.27	53	57	42		51	48	
22	.18	51	60	37		48	46	
23	.30	50	58	36		43	42	
24	.30	53	62	43		54	50	
25	.36	55	63	48		58	53	
26	.42	55	55	51		53	50	
27	.28	54	57	49		50	49	.08
28	.05	56	67	49		56	53	
29	.41	53	49	37		42	38	
30	.22	49	53	37		45	42	
31	.19	53	60	40		51	48	

ERRATA.

Page	7,	line	9,	for	*totoise-shell*, read, *tortoise-shell.*
„	19,	„	5,	„	*parmanently*, read, *permanently.*
„	21,	„	7,	„	*there*, read, *then.*
„	44,	„	10,	„	*the fathoms*, read, *ten fathoms.*
„	49,	„	22,	„	*efford*, read, *afford.*
„	56,	„	4,	„	*one*, read, *on.*
„	72,	„	4,	„	*Seaole*, read, *Seao-le.*
„	73,	„	29,	„	*gingle*, read, *jungle.*
„	73,	„	29,	„	*Seaole*, read, *Seao-le.*
„	74,	„	7,	„	*Seaole*, read, *Seao-le.*
„	74,	„	8,	„	*dielect*, read, *dialect.*
„	76,	„	10,	„	*beseeched*, read, *besought.*
„	78,	„	31,	„	*Seaole*, read, *Seao-le.*
„	140,	„	2,	„	*the origin*, read, *their origin.*
„	153,	„	5,	„	*were*, read, *was.*
„	171,	„	27,	„	*foul*, read, *fowl.*
„	175,	„	37,	„	*utterring*, read, *uttering.*
„	176,	„	33,	„	*early brother*, read, *elder brother.*
„	177,	„	24,	„	*favourits*, read, *favourites.*
„	203,	„	6,	„	*discription*, read, *description.*
„	248,	„	39,	„	*November*, read, *October.*

JOURNAL

OF THE

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OF THE

ROYAL ASIATIC SOCIETY.

NEW SERIES No. VIII.

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REPORT

OF THE

COUNCIL OF THE NORTH-CHINA BRANCH

OF THE

Royal Asiatic Society

For the Year 1873.

THE following gentlemen were elected office-bearers at the first meeting of the year:—

F. B. FORBES, Esq., President.
A. WYLIE, Esq., } Vice-Presidents.
A. MICHIE, Esq., }
T. G. SMITH, Esq., Secretary.
J. E. REDING, Esq., Corresponding Secretary.
H. CORDIER, Esq., Librarian.
P. K. DUMARESQ, Esq., Treasurer.
W. B. PRYER, Esq., Curator.
The Rev. Canon BUTCHER,
Rev. J. THOMAS,
D. J. MACGOWAN, Esq., M.D.,
Sir EDMUND HORNBY,
W. H. MEDHURST, Esq., } Members of the Council.
T. W. KINGSMILL, Esq.,
T. DICK, Esq.,
F. B. JOHNSON, Esq.,
J. HAAS, Esq.,

A vacancy having occurred in the Council by the departure of Mr. Dick for Europe, Geo. F. Seward, Esq. was unanimously elected to fill the same, during the remainder of the season.

The Society has to deplore the loss by death of several of its Members during the year, particularly those of Professor Stanislas Julien, and B. Hobson, M.B. of Canton.

A few months ago the Council appointed a Committee consisting of Messrs. Medhurst, Michie and Forbes to revise the Rules of the Society. The results of their works have been laid before the Members, and the Council propose to publish the New Rules, when finally passed, as an appendix to the present report.

During the year seven (7) meetings have taken place, at which seven Resident and two Non-Resident Members have joined the Society.

Six Members have resigned during the year.

The present List of Members consists of twelve Honorary, thirty-four Corresponding, seventy-six Resident and eighty Non-Resident. Total two hundred and two Members.

A List of the Members is herewith appended.

The following papers were read during the year:—

Recollections of Life in China, previous to 1840,
by S. Wells Williams, L.L.D.

On the Early History of Shanghai,
by Carl Schmidt, Esq.

The Legend of Wen Wang, Founder of the Chow Dynasty in China,
by T. W. Kingsmill, Esq.

Fox Myths,
by T. Watters, Esq.

A Visit to Chui-fu-hin, the final resting place of Confucius,
by the Rev. J. Edkins.

An Account of the Recent Expedition by the French up the River Meikong, by M. Francis Garnier,
S. Viguier, Esq.

Notes on Chinese Musical Instruments,
by N. B. Dennys, Esq.

Inscriptions on the Stone Drums of the Chow Dynasty,
by S. W. Bushell, Esq., M.D.

Some recent explorations in Hangchow, having more especial reference to the descriptions of Marco Polo,
by the Rev. G. E. Moule.

A list of donations to the Society will be found in the Librarian's Report.

Appended is the Balance Sheet for the year 1873, showing a surplus in hand of Tls. 473.17.

Librarian's Report.

A glance at the list of works presented to the Library during the present year will show that while the donations have been more numerous than during the preceeding year, the importance of some of them, for instance the "Voyage d'Exploration en Indo-Chine" of Commandant Doudart de Lagrée, cannot be over-

estimated. This is progress surely, but it does not fulfill our expectations; the progress of a library is measured by the increase in the number and importance of the works presented yearly compared with the list of the desiderata; a very small progress indeed have we made then if we look to the object we had in view when the library was first begun: a complete collection of works on China, and if we think of the number of years which will be required to reach it at such a slow pace.

We expressed last year a hope that the state of the finances of the Society would enable the Council to devote some of the funds at their disposal to the purchase of new books; and we had drawn attention to several works wanted; we had also indicated a few general works of reference needed by any Library and pointed out that not only were new purchases necessary but that in order to keep the old ones some money ought to be spent for their preservation: repairs, bookbinding, &c. Our hopes have not been realized and we can only renew them this year.

The Catalogue of the Library published last year included all the works presented up to the 31st of December; in our Report for 1872 we gave therefore only the short titles of the works; this year we give the titles in full to facilitate the preparation of a Supplement to the Catalogue.

HENRI CORDIER,
Hon. Librarian N. C. B. R. A. S.

List of Works presented to the Library of the North-China Branch of the Royal Asiatic Society during the year 1873.

Reports of the United States Commissioners to the Paris Universal Exposition, 1867. Published under direction of the Secretary of State by authority of the Senate of the United States. Edited by William P. Blake, Commissioner of the State of California. Washington, Government Printing Office, 1870, 6 vols. 8vo. From the U. S. Department of State.

Nalas und Damajanti. Eine Indische Dichtung aus dem übersetz von Franz Bopp, Berlin, 1838, 12mo. From K. Himly, Esq.

Report from the Select Committee on Commercial Relations with China; together with the Minutes of Evidence, Appendix and Index, 1847; small folio.

Bulletin de la Société de Géographie de Paris. From the Society.

Bulletin Mensuel de la Société d'Acclimatation de Paris.

The Chinese Commercial Guide.....by S. Wells Williams, LL.D. 5th ed. Hongkong, Shortrede, 1863, 8vo. pp. XVI—388—266. From the Author.

The Naturalist's Library conducted by Sir William Jardine, Bart. Edinburgh, W. H. Lizars, 40 vols. 12mo. (1833-1843).

Mammalia, (1833-1842)	13 vols.
Ichthyology, (1835-1843).....	6 „
Entomology, (1840-1841)	7 „
Ornithology, (1834-1843).....	14 „
	40 vols.

From Capt. W. C. Law.

Voyage d'Exploration en Indo-Chine effectué pendant les années 1866, 1867, et 1868 par une commission française présidée par M. le Capitaine de Frégate Doudart de Lagrée, et publié par les ordres du ministre de la marine, sous la direction de M. le lieutenant de vaisseau Francis Garnier, avec le concours de M. Delaporte, lieutenant de vaisseau, et de MM. Joubert et Thorel, médecins de la marine, membres de la commission. Paris, *Lib. Hachette et Cie.* Imp. Crété fils, Corbeil. 2 vols. 4to. v-1015 pages. L'ouvrage est illustré de 250 gravures sur bois et accompagné d'un atlas. From Mr. Francis Garnier.

Journal of the American Oriental Society, New Haven. Vol. IX, Nos. I & II, Vol. X, No. I. (1869-1872) 3 vols. 8vo. From the Society.

Recherches sur l'Existence des Juifs en Chine depuis les temps les plus reculés jusqu'à nos jours par Mr. A. Wylie. *Mémoire traduit de* l'anglais par M. l'abbé Th. Blanc et annoté par M. G. Pauthier. Paris, 1864, ppt. 8vo. From the Author.

Translation and Remarks on an Ancient Buddhist inscription at Ken-yung-kwan in North-China by A. Wylie. (Rep. from the Transactions of the R. A. Society December 1870) ppt. 8vo. From the Author.

Sur une Inscription Mongole en caractères Pá-sse-Pa, par M. A. Wylie. Ppt. 8vo. Paris, 1862. From the Author.

The Bible in China by A. Wylie, Esq. (Rep. from the Chinese Recorder, Nov. & Dec. 1868). Ppt. 8vo. From the Author.

Jerusalem, an Introduction to its Archæology and Topography by William Simpson, London, 1872, ppt. 8vo. From the Author.

(Mr. William Simpson is the Artist who was sent last year to China by the "Illustrated London News" to sketch the chief scenes of the Marriage of the Emperor.

Mittheilungen der Deutschen Gesellschaft für Natur und Völkerkunde Ostasiens. Herausgegeben von dem Vorstande. Yokohama, 1st and 2nd Nos. (1873). From the Society.

Catalogue des Collections rapportées de l'Amérique Russe.....par A. Pinart. Paris, Claye, 1872, 8vo. From E. Leroux, Paris.

Bidrag til Kundskab om Christianiafjordens Fauna II. Af Michael Sars, Christiania, Johan Dahl, 1870, 8vo.

Christiania omegns Phanerogamer og Bregn[illegible] udbredelse samt er[illegible] af underlaget af A. [illegible], 1870, 8vo.

Det Kongelige Norste Frederiks Universitets Aarsberetning for Aaret 1870. Christiania, 1871, 8vo.

Thomas Saga [illegible] om Thomas Becket Erkebishop of Can[illegible]. Christiania, 1869, 8vo.

Le Névé de Instedal et ses Glaciers par C. de Seue.....4to. Christiania, 1870.

Annales de l'Institut météorologique de Norvége, 1867-70. From the Royal University of Norway.

On the Ch'ing Muh Hsiang, or "Green Putchuk" of the Chinese. With some remarks on the antidotal virtues ascribed to Aristolochiæ by H. F. Hance, Ph. D. ppt. 8vo. [Reprinted from the "Journal of Botany" for March 1873.] From the Author.

Report of the Secretary of War, being part of the Message and Documents communicated to the two Houses of Congress at the beginning of the second session of the forty-second Congress. Vol. II, Washington, 1871, 8vo.

Annual Report of the Secretary of War on the Operations of the Department for the fiscal year ended June 30, 1872. Vol. II, Washington, 1872, 8vo. F[illegible] U. S. S. *Iroquois*.

A Chinese and English V[illegible] by George Carter Stent, Shanghai, Customs' Press, 1871, 8vo.

Idem, Photographed on a Fan. From the Author.

"Fanning the Grave and the Wife tested" by G. C. Stent, Shanghai, 1873, ppt. 12mo. From the Author.

"Jên Kuei's Return"—a Play [From the Chinese] by G. C. Stent, Shanghai, 1873, ppt. 12mo. From the Author.

Cosmos—Communicazioni sui Progressi più recenti e notevoli della Geografia e della Scienza affini di Guido Cora II, III-IV, Torino, Guido Cora, 1873, 4to.

Constitution and By-Laws of Minnesota Academy of Natural Sciences with Address of President, List of Officers and Committees for 1873. Minneapolis, 1873, ppt. 8vo. From the Academy.

VIII und IX Jahresbericht des Vereins für Erddkunde zu Dresden 1872. Dresden, 8vo.

HENRI CORDIER,
Hon. Librarian N. C. B. R. A. S.

SHANGHAI, 1*st January*, 1874.

Treasurer's Report.

The Balance Sheet for the year 1873, which I have now to present, is more than usually satisfactory, in as much as all claims upon the Society, to date, have been paid, leaving a balance of Tls. 473.17 in hand, and there is still a considerable amount to be collected from non-resident subscribers.

The cost of certain improvements now in contemplation will reduce this balance by about Tls. 150, and leave the Society with ample funds for printing the Journal.

P. K. DUMARESQ,
Hon. Treasurer N.-C. B. of R. A. S.

December 31*st*, 1873.

BALANCE SHEET OF THE

North-China Branch of the Royal Asiatic Society

Dr. **FOR THE YEAR 1873.** *Cr.*

RECEIPTS.	$	cts.	Tls.	cts.
To Balance December 31st, 1872 ...			277	52
„ Subscriptions collected to date			764	76
„ Sales of Journals and Catalogues			19	49
Tls.			1,061	77

DISBURSEMENTS.	$	cts.	Tls.	cts.
By Sundry Expenses and Advertisements			202	49
„ Printing			331	11
„ Insurance			55	00
„ Balance			473	17
Tls.			1,061	77

P. K. DUMARESQ,

Hon. Treasurer N.-C. B. R. A. S.

Weather Report for 1873

THE following tables with observations were taken under the superintendence of the Shanghai Meteorological Committee.

Months.	Highest Range of Barometer.		Lowest Range of Barometer.		Thermometer in the Shade.		Hours of Rain.	No. of Gales.	Prevailing Winds.
	Barometer.	Attached Thermometer	Barometer.	Attached Thermometer	Max.	Min.			
		°		°	°	°			
January ...	30.558	38	29.700	39	57	25	44	4	N.W.; N.E.
February	30.651	35	29.950	52	65	23	28	2	N.W.
March	30.454	53	30.000	58	64	33	52	2	N.W.; S.E.
April	30.356	55	29.846	68	80	41	54	3	Variable.
May	30.251	59	29.800	71	84	45	35	2	S.E.
June	30.155	70	29.730	75	82	61	45	1	E.S.E.
July	30.010	81	29.745	82	96	73	9	1	S.S.E.
August ...	30.050	74	29.730	76	94	70	36	0	S.E.; N.E.
September	30.160	70	29.746	77	85	65	75	3	N.E.; N.W.
October ...	30.360	54	30.950	68	75	46	35	1	N.E.; N.W.
November	30.502	56	30.054	57	72	34	2	1	Variable.
December	30.603	46	30.000	54	66	32	57	1	S.W;N.W;N.E.

The instrument from which the barometrical observations were taken is a Fortin's standard of 5-10 inch bore No. 287. It is placed about 16 feet above the river level. Highest rise of water during spring tides is from 11 feet 6 inches to 12 feet.

The gales of January 1873 were of unusual severity. At this time a serious depression in the mercury tube was existing over the north coast as far as Chefoo, and the barometrical reading of 29.700 inches in Shanghai on the 3rd of that month was registered with a temperature of 25° of Fahrenheit. The maximum 30.651 inches in February 1873 was lower than the highest rise of 1871 and 1872, though higher than any reading of 1867, 1868, 1869 and 1870.

The maximum temperature 96° of Fahrenheit in the month of July 1873 was 2° below what it rose to in 1867, 1868, 1869, 1870 and 1872, and 3° in 1871. The minimum of 23° in the month

of February 1873, was identical with what it fell to in January 1872. The lowest range of Thermometer for the past seven years being 26° in January 1867, 19° in December 1868, 21° in January 1869, 22° in January and December 1870, 19° in December 1871, 23° in January 1872 and 23° in 1873.

A careful register of the Ozonometer has been kept both night and day. Observations of these delicate air tests are vitiated when gases are developed, but if the gradations 6 and 7 of Schönbein's scale really indicate a healthy atmosphere most certainly Shanghai is a favoured spot.

With the exception of the years 1871 and 1872, less rain fell in 1873 than in any other year since 1866. The aggregate number of hours rain in 1867 and the six following years being 645 in 1867, 952 in 1868, 978 in 1869, 673 in 1870, 351 in 1871, 298 in 1872 and 472 in 1873. Save and except in September 1869, 75 hours rain in last September was the highest number registered in that month of any year since 1866, and 2 in November the least recorded in any month during the same period. The scarcity of rain in the month of June of 1870, was unusual, and the drought experienced in consequence equalled by none since 1864; circumstance which materially influenced agricultural operations. The disparity is best shown by the following number of hours rain in the month of June for the past seven years. In 1867, 113; in 1868, 117; in 1869, 130; in 1870, 102; in 1871, 30; in 1872, 104 and 35 in 1873.

Number of gales in 1873 amount to 20, 3 in excess of 1872. A storm of unusual violence, and the hardest blow of the year, passed over this district in the beginning of January. Considerable damage was done to native vessels and many were totally lost. Several typhoons have been experienced to the southward and eastward of the Yang-tsze Cape, and on the Coast of Japan, though none have passed over this locality.

The prevailing winds for corresponding months may be said as a rule to be almost the same every year, and the steady breezes during the first three weeks of July 1873, travelling at the rate of from 21 to 40 miles an hour, as also the light and variable airs of November last were exceptional.

SHANGHAI, 1*st January*, 1874.

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JOURNAL

OF THE

NORTH-CHINA BRANCH

OF THE

ROYAL ASIATIC SOCIETY.

ARTICLE I.

RECOLLECTIONS OF CHINA PRIOR TO 1840.*

By S. W. WILLIAMS, L.L.D.

THE treatment of a subject like this is not very easy, considering that there will be many who would like to have particular information upon certain things, and others who would desire to be informed on other points; but I shall endeavour, in going over the details of those years, to give such an idea of the mode of living and the character of the foreign community, and its relations with the Chinese, as will in some measure supply a description of the way in which foreigners lived and traded, and went about in those early days. When I arrived after a passage of 127 days, we brought three days latest news from America. It was the season when most of the tea ships arrived, and news was then thought to come in very rapidly, as it was seldom at that time of year that more than a week or two elapsed without some ship arriving. Within the next two years, however, there was one interval of nearly 80 days, during which we heard nothing from either England or America, and one ship brought, in that case, nearly three months' additional news from those countries. When our ship arrived, and had anchored in the waters near Lintin Island, one of the first things that happened was the coming of a boat-load of cassia from Canton, to be put on board at the outside anchorage;

* Delivered before the Society on the 13th January, 1873.

so that when the ship arrived, the dunnage for the tea she was to take in would be ready for her. This was brought down by the Chinese. We had to send over to Macao, 20 miles, to get a pilot, and when we went up river we had the native pilots furnished by the Chinese Government from the Pilot Office at Macao. At Whampoa lay the large fleet of the East India Company. At that time the Company had received notice that they were in future to be a political, instead of a trading Company, and this being the last season, they had a large number of ships at Whampoa—the finest fleet, perhaps, to be seen anywhere in the world—some of which had from 70 to 90 men on board; the number of ships at Whampoa, stretching along three miles, was about 125 in all. None were allowed to go up to Canton; indeed, it was only some seven years after, that there was known to be a passage by which they could get up, so carefully had the Chinese kept foreigners ignorant of the channels. When we went to Canton, it was always by ships' boats, manned by the crews, unless we got out a pass for a dollar-boat. These, which by the way always cost $4, were furnished by the compradore of the ship, and had to report at two or three "chop-houses," along the way up. But most of the ships had their own boats, and as there were so many sailors, lascars especially, I have often seen over 100 together, who frequently for want of accommodation turned the boats upside down, in warm weather particularly, and found a sleeping place underneath or prepared their meals by it. Opposite the factories a small creek ran in-shore, and boats came up to the tidewaiter's station at its head, to land their passengers. The word *Factories* was applied to the foreign dwellings at Canton, not because any work was carried on, but because *factors* lived in them. This was an old name which had been known in India and the Archipelago. As soon as the ship I was in arrived, it was reported to the Hong Merchants, that such a ship had come to Olyphant & Co., as well as the names and number of the passengers who were to stay at Canton—and these Hong Merchants became security for our good conduct. We never saw these men, but they became official security to their Government for our good behaviour, and that we should not do anything against its interest. At that time there were only 5 or 6 Hong Merchants, who were really solvent, for the system was a contrivance on the part of the Chinese Government to secure the collection of the duties, and they became responsible for so much duty as the Government was

pleased to collect from the commerce. The trade that year was, as I have said, a very large one, and the East India Company had the largest portion of it.

At the time of my arrival at Canton, Mr. Plowden was what was called President of the supercargoes of the East India Company; Mr., afterwards Sir John, Davis being also one of them. There were 22 or 24 of these supercargoes in all, and of these, one-half or three-fifths were generally resident at Canton. Of the foreign firms that did business apart from the Company, there are five and, I believe, only five that still exist, viz.:—Messrs. Jardine, Matheson & Co., Dent & Co., and Turner & Co., British; and Messrs. Russell & Co. and Olyphant & Co., American. The residents of Canton numbered about 250 more or less, and, as a contrast to the state of things at present, I may state that there was but one German and two Frenchmen. There were a good number of Parsees, British subjects. Among the 250 residents there was not one lady; such foreign families as were in China staid down at Macao, and it was not till 1843 or 1844 that any foreign families were allowed to reside at Canton. I learned that, before I arrived, a Mr. Bannerman attempted to take his family up to Canton with him, and so apprehensive was he of what the Chinese might do in consequence, that he had guns brought up from the ships and placed up and down among the factories to defend himself and others.

The factories were a series of 13 "Hongs," quite different from anything that can be seen in this part of China. They were placed close side by side of each other, forming as it were a row or "terrace" fronting the river, but each Hong consisted of a series of buildings placed one behind the other from the river backwards, for a depth of from 550 to 600 feet to the first street running parallel with the river. They were, in fact, modelled on the Chinese ground plan for the building of extensive houses, viz., court within court in as long a series as may be possible or desirable. The approach to those in the rear was through the basement of those in front. The interval between the houses was from 30 to 60 feet, or more. The upper storeys of these buildings were divided off by partitions. Some of them had only two storeys, but that in which I lived had three. The old factories had been entirely destroyed by fire in 1822, but they were rebuilt at the expense of the Hong Merchants who owned most of them.

Of these Hong Merchants the chief was Howqua, who was in many respects a very remarkable man. These merchants were the intermediaries between the Chinese authorities and foreigners. When foreigners wished anything from the Chinese authorities, the plan was to draw up a petition and take it to a certain gate of the City known as the Oil Gate, where it was received by a policeman, or some low official who was generally at hand. But sometimes the Hong Merchants refused to receive or transmit such petitions. On one occasion a Scotchman named Innes, a man of great energy, brought a petition to the Oil Gate, but the Hong Merchants having got a hint of its purport refused to receive it. He waited at the Gate all day, but they persisted in their refusal. As night approached, he gave orders to his boy to go and fetch his bed, as an indication that he intended to stop there all night, and when the merchants came to know that, they received his petition. On another occasion before my arrival Mr. Jardine, the head of Jardine, Matheson & Co., having taken a petition to the gate in question got rather hard usage, some one having struck him a rap on the head. He, however, never stirred, or gave any indication that the blow had hurt him, from which circumstance he came to be known and spoken of by the Chinese, during all his subsequent stay in China, as (鐵頭老鼠) *teet tow lo shu*, "the iron headed old rat." This gate,—a very small one in the Southern Wall of Canton City—I have myself very frequently visited, but never with a petition.

As I have already said, there were no ladies at Canton till after the ratification of the Treaty of Nanking in 1843. Shortly after I arrived in Canton, Mr. Plowden left for England and Mr. Davis (afterward Sir John) took charge. He was the last of the East India Company's Presidents. I cannot tell what number he held in the series, but as the East India Company was established about A.D. 1600, he must have had a long line of predecessors during the interval of over 230 years. Of the merchants trading at Canton who were British subjects, most accepted a Consular commission from the Governments of other countries, as prior to 1834 the East India Company had the exclusive privilege of trading, and all British subjects must be under them. There were 13 factories for the 250 residents above mentioned, and the area covered by the factories was exactly that of the Great Pyramid—12 acres. Facing the river in front of the houses there was a small opening or square which had been gradually gained

from the river, which became a favorite place of resort for hucksters and beggars, the latter being attracted to the spot by the Parsees frequently distributing alms in the neighbouring streets. From this open space a series of shops ran up through the factories for a depth backward, as I have said, of about 500 or 600 feet. The factories extended abreast of the river for over 1,000 feet. They were known as the Creek, Dutch, English, Parsee, Old English, Swedish, Austrian, Paou-shun, American, French, Spanish, and Danish. That known as the "Creek" Factory was occupied by Jardine, Matheson & Co. In the Factory Block there also stood one native Hong belonging to the Hong Merchants, and three streets. The Mission printing office was located on the basement floor for a while. The East India Company occupied two factories, within which they had a chapel, which most of the foreign residents attended.

The foreign shipping all remained at Whampoa, and all the tea was taken down to that place in large cargo boats; the number of Chinese who found employment in curing, sorting, and packing tea and putting up other goods was very great.

The non-renewal of the East India Company's Charter in 1834 having essentially changed the conditions under which the foreign trade was carried on, a British Superintendent of Trade was sent out, Lord Napier, the father of the present Governor of Madras. He was sent out to oversee the trade which was now open to all British subjects. Sir John Davis, was, I think, next under Lord Napier, and among his other assistants was Captain Elliot R. N. who became his successor. Lord Napier arrived in July 1834, and had Dr. Morrison as interpreter and his son Mr. John R. Morrison. Lord Napier at once proceeded to open communications with the Governor-General on a footing of equality, that is, he addressed the Governor-General as the accredited representative of the British Crown, an equal sovereign power. But when his first official communication was received by the Hong Merchants they demurred to transmitting it, because it was not in the customary form of a petition. It was sent to the usual place of delivery, the Oil Gate, but no one would receive it there. Lord Napier thus felt it necessary to take measures to prevent himself from being treated with indignity, and the *Imogene* and *Andromache* were ordered up from outside. Thus happened the first collision between the British and the Chinese Governments in modern times. There had been difficulties previously, but they

had not been between the two governments. But the action of Lord Napier raised a direct issue between the Chinese and the British authorities. Up to this time foreigners had no idea,—indeed, they hardly have yet any adequate idea of the political importance of the Chinese assumption of supremacy over all other nations.

Lord Napier's attempt to open direct communication with the Chinese authorities was made at the worst season of the year, in July, August and September, when the climate is at its sickliest, and, what between anxiety, fatigue and other causes, Lord Napier became very sick and was forced to make application for one of the boats in which foreigners were in the habit of travelling to Macao. The providing of those boats was a perquisite of the compradores, and the boats generally went down by what was called the Inner Passage. It was a most agreeable mode of travelling. The trip lasted usually two days and was very pleasant; but Lord Napier was subjected to various detentions on the way, and died shortly after he reached Macao, where his lady and their daughters were, just three months after his arrival in China. His death was much regretted by all who knew him. This attempt of Lord Napier's was the first made by foreigners to open direct communication on terms of equality with the Chinese; and now for the first time their arrogant assumption of supremacy over all other nations cropped up. The people of Canton were much interested in the matter, but we experienced no difficulty so far as they were concerned. All communication, however, between Whampoa and Canton was interrupted, and for 10 days we were as closely shut in as rats in a trap. Lord Napier's effort was also interesting as being the first time the Chinese authorities gave the people of Canton an opportunity of understanding in what light they wished their intercourse with foreigners to be regarded.

In those days the greatest difficulty was experienced in getting properly qualified persons to teach us Chinese. I secured a teacher of considerable literary attainments, and he took the special precaution, lest he should be informed against by some one, of always bringing with him and laying on the table a foreign lady's shoe, so that if any one he was afraid of or did not know came in, he would pretend that he was a Chinese manufacturer of foreign shoes. This he continued to do for months, till he became convinced that his fears were groundless. One of Dr. Morrison's teachers always carried some poison about him, so that if he found he had been informed against to the Chinese authorities as being

implicated as a Chinese traitor, he might take his own life and so avoid their tortures,—for such a charge was then regarded as one of the most offensive and dangerous that could be brought against a native. This I afterwards learned from one of his fellow teachers. I originally came to Canton to take charge of the American Mission Press there, and found only two missionaries,—Doctor Morrison and Mr. Bridgman. Mr. Gutzlaff had arrived in China but was then on an exploring tour up the coast; and indeed throughout his life he was chiefly engaged in the service of the British Government, though he also did a large amount of mission work. The font of Chinese type which had been cut at great expense for the printing of Morrison's Dictionary was just before this time brought up to Canton, but so great were the fears of the Cantonese printers that their officials would find out that they worked with foreign type, that the font had ere long to be taken back to Macao for safety, in case the authorities should on any pretext come to examine the factories.

That the fear of such a visit of inspection was not groundless, was proved by a circumstance that occurred about that time. The East India Company had so arranged the large factory occupied by them that they had managed at great expense to lay out a garden on its river front, extending to about half an acre, which was nicely kept and afforded a very pleasant promenade in summer time, as, being walled in, it was free from the intrusion of beggars and hucksters. This garden they had enlarged by extending their wall so as to include some land that had silted up from the river and was dry at low water. Soon after this acquisition had been made, the Fuyuen of Canton suddenly appeared one morning in front of the Factories, having with him a large band of attendants, several of whom were armed with shovels, with which they forthwith began to shovel this new piece of garden into the river, reducing the Company's pleasure ground to its original size. The mud thrown into the river was carried down a short distance and there collected, and being increased by subsequent siltings, formed the nucleus of a bank. The Governor having, as he flattered himself, effectually put an end to such foreign encroachments, returned into the City, but the Hong Merchants rather laughed at what he, no doubt, thought a very valorous exploit.

When I arrived in Canton, I found there some men who had lived many years in China. Among these was Mr. Thomas Beale, the father of Mr. Beale subsequently of Dent, Beale & Co.'s.

This gentleman told me that in 1799 he had gone up to Chusan to take delivery of something left there by H. M. S. *Lion*, which brought out Lord Macartney's Embassy. You thus see that the present times are connected with those of that Embassy by only two lives. Mr. Beale had at that time lived some 35 years in China without ever having left the country. He had collected at his residence in Macao a fine garden and splendid aviary, which was deservedly a great celebrity. When I first saw it, there were 200 birds in it, about 20 of them being large and magnificent pheasants; but about two years afterwards the birds were attacked by a kind of murrain, brought on probably by a sudden change of the weather, and most of them died—a disaster greatly to be lamented. Mr. Beale was the first to send to England the "Reeves" Pheasant, which he had procured from the interior at great expense. He had also a number of "Medallion" Pheasants and several other rare kinds which he was the first to collect. From the interior of the aviary rose two large *longan* trees, among the branches of which the birds might disport themselves, while in the centre of it was a pond where the various kinds of ducks could indulge in their specific propensities. It was altogether a most interesting collection.

According to the usage then, the tea trade was over by the 1st of July, and then every one who possibly could, made for Macao, where the families of the leading employés of the East India Company resided, as well as 8 or 10 others. Thus during July, August and September most of the residents at Canton were to be found at Macao. Indeed, a gentleman who had been Consul at Canton told me that in one season, 1805, only two foreigners were left at Canton—that is excluding the Parsees who were not so migratory. This general resort of foreigners to Macao at the end of summer and the beginning of autumn made the arrival of the tea ships from home about the end of August a time of great interest, which was still further enhanced by the arrival at the same time of the cotton ships from India. Hongkong was then little known. In fact there were very few who had been there. At Macao there was at the time I am speaking of, a very interesting old gentleman, who remained there till he died. He was a Swede named Ljungstedt, who wrote a most laborious history of Macao, which is indeed the only thorough account of that Colony that we yet possess. He had been Agent for the Swedish East India Company. There was also resident there Chinnery,

an English artist, who has left us many memorials of his life both in India and China. He also died in Macao.

As soon as the monopoly of the East India Company expired in 1833, there naturally came a great influx of foreigners, chiefly from England or India who established new firms, and from 1834 to 1842 and 1843, there were few places in the East that could compare with Canton for the high grade, intelligence and enterprise of its merchants. Among them were numbered such names as those of Mr. Jardine, Mr. Lancelot Dent, Mr., now Sir James Matheson, Mr. C. W. King of Olyphant & Co., Mr. J. C. Green and Mr. A. A. Low of Russell & Co.'s, and Mr. Robert Inglis. On the death of Dr. Morrison in 1834, many of these took the greatest interest in the formation of the Morrison Education Society as a memorial to that great and good man, and Mr. L. Dent, Mr. Jardine, Mr. Matheson and Mr. Olyphant especially, continued for many years to give it the benefit of their valuable counsel and support. Another valuable institution, started about this time, was the Medical Missionary Society of Canton. This was initiated by Dr. Parker, of Canton, in 1835; and the same gentlemen as those above named contributed greatly to its maintenance and success. Mr. Turner also, the founder of the house of Turner & Co., continued till his death in 1839 to take interest in both these Societies.

The Superintendent of British Trade in the person of Lord Napier having been so badly treated at Canton, the Office of the Superintendency was removed to Macao to await the advent of better days. It remained there for some years, a clerk only being kept at Canton to receive ships' papers and such other official business as might be necessary. During the years 1837 and 1838, commenced the remarkable proceedings of the Chinese Government with a view to putting down the opium trade. The movement appears to have originated with Hü Nai-tsi. He was connected with the Board of Rites, but his reputation for character and talent is unknown. This man about 1836 or 1837 drew up a memorial to the Emperor, in which he called attention to the rapid growth of the traffic in the prohibited article of opium, and proposed in order to put a stop to the wholesale smuggling of the article to legalize the trade. Considering the limited opportunities of the writer to acquaint himself with such a subject, his arguments were creditable. The importance of the subject being recognized, the Emperor Taou-kwang issued a circular to the chief dignitaries

throughout the Empire enclosing a copy of Hü Nai-tsi's memorial, and asking them to state their several opinions whether his proposal to legalize the trade should be accepted or rejected. It was two years before all the replies were received, and then it was found that the majority of voices were for rejecting the proposal. They declared that they had carefully examined into the effects of opium on the country and people, and found it to be so injurious in demoralizing the people, and draining the country of its wealth that they held it best that decisive steps should be taken to put down the traffic. It was this response to his circular that determined the Emperor to appoint for the carrying out of the anti-opium policy the celebrated Commissioner Lin.

Lin, who was appointed anti-opium Imperial Commissioner, had previously been Fuyuen (Governor) of this (Kiangsu) province, and his memorials in the *Peking Gazette* had already drawn attention to him as a man of superior ability. Dr. Morrison told me that Lin's memorial on the effects of a severe inundation in this province of Kiangsu was one of the ablest state papers he had ever read. Lin had taken the trouble of travelling over the province and making personal investigation into the condition of the people, and his memorial was that of a man who had seen and heard for himself what he wrote. Lin, armed with full powers to deal with the opium question, came down to Canton. But before his arrival some steps had been taken towards suppressing the trade. The Governor of Canton some 2 or 3 years previously had obtained—no doubt through the Hong Merchants, who made their selection of names, probably, to suit their own purposes—the names of 9 or 11 of the principal foreign dealers in opium, and in the list were the names of 3 who had never had transactions in the drug. It must certainly be admitted that throughout all these troubles, the Hong Merchants were placed in a very difficult situation; they had, in fact, to act as a sort of buffer between the Governor-General and Hoppo and the Foreigners; on the one hand, they wished to please the foreigners who gave them trade, and, on the other, they very naturally feared to offend the Viceroy who might take their lives. The part they had to play, therefore, was not an easy one. The foreigners, whose names were thus given to the Governor were subsequently ordered to leave the country. And when Lin came to Canton the Chinese did not fail to remark that not one of the 9 or 11 remained there,—they had all either returned home or had removed to Macao. Mr. Jardine

was one of them, and Mr. Gordon who had then gone home, and some others; while another of them, Mr. Turner, had just died at Macao—a fact which the Chinese, as is their wont, did not fail to ascribe to the anger of Heaven against men who had engaged in such a trade.

When Lin arrived, he soon gave proofs that he was thoroughly in earnest in his resolution to faithfully discharge the trust committed to him, but how to set about it he was as ignorant of as one can well imagine. The trade in opium was very dull at the time; the fact being that people were afraid to deal in it, and so it happened that the stock on hand was very large. Lin adopted the plan of keeping himself incognito for a fortnight or so after his arrival, during which he used all diligence in endeavouring to collect information about the opium trade; but the information procured was as incorrect as might have been expected to be got from such a people by this method. He never communicated with Captain Elliot, nor sought to learn from the foreigners, the information on the subject which they were willing and able to furnish. But, proceeding in the underhand manner just described, Lin suddenly came to a resolution as to the course of action he would pursue, and one day forcigners in Canton suddenly found themselves shut up as they had been immediately after Lord Napier left Canton. About 4 P.M. one day a man went up and down through the Factories, calling out in Chinese, and warning every Chinese servant to leave; and in two hours there was not a single native servant in all the 13 Factories. A line of boats was also placed in the river abreast of the Factories, so that escape from that side would be impossible. The residents by this time must have numbered about 300. I have several lists of them in my house in Peking, but not in Shanghai. All these 300 residents had, for the time, to depend on the assistance of the Parsees' servants, who, knowing a little of the Cantonese dialect, were able to go into the adjoining markets and purchase some things. But the supplies they bought were inadequate, and we had to make a careful inspection of our store-rooms and larders to see what resources were left us; and what between laying tables, washing dishes and trying to cook, we considered we had rather a hard time of it. It was no small privation to be forced to go down ourselves and carry unfiltered water from the river. By-and-by the Governor took pity on us and sent us some bullocks, pigs and poultry. These, however, the foreigners refused to touch,

and, indeed, some of them were allowed to starve at our doors. I suppose the Hong Merchants gave the Governor a hint that that was hardly the way to get on with us. At all events greater freedom was soon allowed, and facilities were afforded us to procure wood and water, which, especially the latter, had been almost unprocurable. We were indeed, put to many a strange shift. This state of blockade lasted for a little less than 3 months.

Captain Elliot was at Macao when these occurrences took place, and as soon as he heard of it he came up to Canton and took the management of affairs, and Lin was no doubt glad to have some responsible head of affairs to deal with. It is not necessary that I should follow in detail the history of the measures and negotiations which led Captain Elliot to surrender to Lin, under protest, 20,283 chests of opium, being all the drug at that time remaining in the hands of British merchants in Chinese waters. All this immense quantity was brought together at a place a little below the Bogue Forts, in the Summer of 1839. While these negotiations were going on, the foreigners were kept within their own bounds very strictly; but within these limits there was no restraint on their personal liberty. Business was of course, entirely suspended; but no one suffered any other loss or damage; no one fell sick; and the ships at Whampoa were kept supplied with food throughout the three months blockade. At length when Captain Elliot had given up the opium, foreigners were permitted to leave, and some of them were told never to return, though who these were I am here unable to mention.

Few of the foreign officials who have come to China have been superior in talent, or better fitted than was Captain Elliot to fulfill the important duties devolving upon him. Having lived in the country for five years (he came in 1834), he had obtained a very good idea of Chinese character, and how they could be suitably dealt with. He had also the advantage of having as his interpreter and adviser Mr. John R. Morrison, Dr. Morrison's son, a man whom it was impossible to know without loving, and who, born in the country and familiar with the Chinese from childhood, was in some respects better qualified than even his father to act in these capacities. Mr. Morrison was a man whom I remember with a respect and love that I feel it hard to describe. He received me when I came to China with that kindness which never failed to leave an impression. Captain Elliot and Mr. Morrison recognised clearly the ideas the Chinese have on the subject of

their unchallengeable supremacy over all other nations—ideas that appear to have grown up in the earliest periods of their history and are to be found in all their writings. And, indeed, it was hardly to be wondered at, if they felt themselves vastly superior to the handful of foreigners who dwelt in the Canton Factories, intent only on trade, which, as you know, is the lowest of the four categories into which the Chinese divide human professions and pursuits. Indeed, the foreign residents themselves appeared to have to some extent imbibed the same ideas, partly in consequence of the way the Chinese officials treated them, and partly because of the position in which we allowed ourselves to be placed relatively to the Chinese. It was by no means pleasant to live among a people cherishing such self-conceited and supercilious notions regarding us.

Before this time an incident occurred which I may relate, both as illustrating the power of officials over the Chinese people, and for other reasons which will appear. As a warning to all, of the fate to which those who dealt in opium made themselves liable, a native who had sold opium near Macao was one day taken outside of the gates of that city, and there, in the presence of thousands, put to death by strangling. That, however, was not considered enough. Soon after, another poor wretch was condemned to a similar death, and he was brought for execution to the front of the Foreign Factories. A few of the foreigners interfered and would not allow the execution to take place there. The yamun runners, therefore, were forced to hurry the hapless man into one of the side streets close by, where they put him to death by strangling, and carrying the body back to the yamun, reported the matter. Attracted by the event, a great crowd, probably 2,000, appeared in front of the Factories in a state of great excitement because the foreigners had dared to interfere with the execution of their law, and soon began to show signs of anger. In front of the Old English Hong and Messrs. Russell & Co.'s there was a wooden balustrade, the pillars of which were speedily torn out to be used as bludgeons, and immediately thereafter they began to throw such bricks as they could get hold of. Soon there would have been a riot and the Factories would in that case have been almost certain to be plundered. But word had been sent to the Chifu, who, quickly getting into the chair, hastened to the spot, and arrived just in time to prevent the pillage from commencing. His only attendants were 6 or 7 runners similar to

those we see around an ordinary mandarin's chair. With these he came into a small street known as Hog Lane, running between some of the Factories down to the river, got out of his chair and simply waved his hand towards the surging crowds. The effect was instantaneous. The immense mob dispersed before that mute gesture like a flock of sheep before a mastiff. The attendant lictors seized some half a dozen of the rioters, threw them on the ground and gave them a bambooing; and all things assumed their usual quiet appearance. This incident occurred in 1839, just before the arrival of Lin, and excited the native authorities a good deal, as it was the first hint they had of foreigners having the spirit to offer resistance and repel force by force.

After the short interval of private preliminary investigation referred to above, Lin issued some of his Edicts, in which he gave public announcement of the views entertained by the Emperor as to the opium traffic, and after issuing one or two of them, he shut us up as already described. Captain Elliot felt that now at length the time had come to bring all previous disputes and misunderstandings to a clear issue, and his superior ability and the justness of his appreciation of the difficulty was shown by his clear recognition that nothing but access to the Central Government could put an end to the complications that had grown up; that by taking the responsibility of complying with Lin's demand and giving up all the opium, he would as it were force the British Government to take the matter up and carry it through to a definite settlement; and that till this was done further progress was impossible. It should be kept in view that all the foreign relations of China had been managed hitherto by the Hong Merchants working with the East India Company a corporate body of merchants, both intent only on preserving and enlarging their trade; and for this state of things, the Hong Merchant system proved sufficient. But as the trade was thrown open to general competition, a new state of things arose, and new arrangements became necessary, and Captain Elliot's move in the surrender of the opium was really the first beginning of that basis on which foreign relations in China are now conducted. And looking back over what has happened since then, I am disposed to think that what Captain Elliot did was the best thing that could have been done in the circumstances, having regard to the nature of the whole question at issue. Captain Elliot, it should be mentioned, was personally much opposed to the opium traffic. He had care-

fully examined the whole subject in its various bearings, and had come to the conclusion that the trade was one that must exert a most hurtful influence on the Chinese, unless they could exercise a strong moral restraint on the use of the drug, which was not at all likely.

When Lin had got possession of the opium by the consent of Captain Elliot, he caused an immense tank, many acres in extent, to be made, at the place above indicated. It was made by simply enclosing a portion of the beach by embankments. This tank was filled with salt water, into which the whole number of chests were thrown, and were, of course, speedily destroyed. While Lin was superintending the destruction of the opium, he sent a messenger to Macao to request Dr. Bridgman to go up and see him. The Chinese portion of the Mission Press had already been taken to Macao, and the rest went there as soon as foreigners were allowed to leave Canton. British subjects were all ordered to leave Canton by Captain Elliot, and by the 1st of June all had left. Only a few American merchants and others remained, by whose means trade continued to be carried on; vessels arriving to British merchants stopped at Macao, and were re-consigned to some of those of other nationalities remaining at Canton. Dr. Bridgman was sent for by Lin at the suggestion of a former pupil of the Doctor's, who spoke English very well, and who was kept employed by Lin in translating into Chinese such portions of foreign newspapers as were of interest for him. And here I may observe that of all the Chinamen I have ever seen, Lin was decidedly the finest looking and the most intelligent. He was, indeed, a very superior man for a Chinese, and if he had only been better informed he might have brought the difficult business entrusted to him to a much more creditable issue than he did; but this his ignorance and the self-conceit that accompanies ignorance prevented. I saw him only once. He was naturally much elated at his rank, and the absolute power entrusted to him to do whatever he pleased in putting down the opium traffic, led him to commit acts of rashness which recoiled upon himself. At the point to which my remarks have now brought me, Lin began to be conscious of this, and to feel that the question with which he had to deal was a much bigger one than he had supposed; too big for him to handle without assistance, and so he sent for Dr. Bridgman.

Dr. Bridgman went up and remained at the Bogue for a day or two. Lin wanted him to carry a letter to Captain Elliot. This

Dr. Bridgman agreed to do provided Lin would make him aware of its contents; but Lin declined to do this, and was told by Dr. Bridgman that he would not carry letters like a common postman. Lin then agreed to write the letter, but when Dr. Bridgman called to take leave, it was not ready, and it was never sent. Lin, however, did write a letter to the Queen of England, the original of which was taken to England, I think, by a ship named the *Royal Saxon*. A copy of it was afterwards procured and a singular document it was. It showed how fully he appreciated the perplexities of the situation he was in, and how helpless he felt to extricate himself from it. He implored the Queen to put a stop to the opium trade.

Between the expiration of the East India Company's monopoly in 1833 and the year 1839, the intercourse and trade of foreigners with China had largely increased and was greatly stimulated by the cruise of the *Lord Amherst* in 1834. The supercargo of that ship was Mr. Hugh H. Lindsay, who had been a servant of the East India Company and who became the founder of Messrs. Lindsay & Co.; Dr. Gutzlaff accompanied him as interpreter. The *Lord Amherst* cruised along the coast, trading, surveying, and observing, and thus added greatly to the information previously possessed of the configuration and trading capacities of the coast. Indeed, it is curious in the light of what we now know, to look back and think how dense was the ignorance of the best informed before that cruise, of places now so familiar as Amoy, Chinchew, Foochow, Ningpo, Chusan and Shanghai. They were till then almost literally unknown to us. From that time onwards the coast of China as far north, at least as Shanghai, was traversed by an ever-increasing fleet of small vessels almost wholly occupied in the contraband opium trade, which, however, were continually adding to our knowledge of the coast and the requirements of the Chinese.

One remarkable feature of the time now under review was the small number of foreigners who were students of Chinese. I can, in fact, remember only five, during the time that Lin was Commissioner; leaving out of view the Portuguese of Macao, few of whom, however, knew anything of the character. One of the five referred to was Mr. Robert Thom, at that time an assistant in Messrs. Jardine, Matheson & Co.'s, but who afterwards became H. M. Consul at Ningpo and died there in 1846; another was Mr. John R. Morrison, already referred to; and a third was Dr. Gutzlaff. These three were the only men who were available to the British

Government as interpreters. But they were all men qualified for the duties of such a post. And when Captain Elliot and Admiral Elliot afterwards had a conference with Kishen and other high functionaries at Taku, it was found that Mr. Morrison had no difficulty either in understanding or making himself understood. But it was a very distinct fact that the authorities at Canton during a long course of years, by their intimidation of natives who aided us to learn it, did much to prevent foreigners from acquiring a knowledge of the language. In order to procure and preserve accurate information, and help in this direction Dr. Bridgman commenced and with myself carried on the *Chinese Repository* for 20 years.

Between my arrival at Canton and 1840, there were two foreign newspapers published. The first of these was the Canton *Register:* the other was the Canton *Courier.* The latter, however, had rather a short life. It criticised somewhat severely certain measures of the East India Company, the Company stopped taking the 12 copies for which it had subscribed, and the *Courier* collapsed. For, in those days, there were few or no advertisements to supplement the income from subscriptions. In fact, there were only two places that could be called shops where foreign articles were to be bought; one kept by Markwick, the other by Edwards, and of these Markwick's was by far the better. There was a chaplain who officiated in winter at Canton and in summer at Macao. Dr. Bridgman had a service all the year round at Canton. Dr. Morrison used to conduct a Chinese service in summer at Macao and at Canton in winter, to which only his servants and a few others came, as it were by stealth.

Besides the *Register* and *Courier* already referred to, there was started at Canton in 1836 the *Canton Press,* between which and the *Register,* a good deal of healthy controversy was kept up and much information was diffused about the Chinese, obtained chiefly through the Morrisons, a considerable portion being translations from the *Peking Gazette.* From these newspapers, as well as from one published at Malacca, Mr. Robert Inglis, a partner of Messrs. Dent & Co., spent much of his time in making extracts, which he reproduced in a series of articles on what he called the Modern History of China, which were published in the *Chinese Repository.* And here it may be worth while to mention, that the work of commencing and getting together and publishing that Repository during the twenty years of its existence, was done chiefly by Dr.

Bridgman and myself. The work was done at the Printing Office of which I had charge, without any outside help in the way of funds. The office supported itself by the works it printed, of which the Repository was one. The result so far as the Repository was concerned, was not encouraging from a pecuniary point of view. During the last seven years of its existence there was an annual deficit of from 300 to 400 dollars. In the last year of its existence it had only 300 subscribers at 3 dollars each, which hardly paid the workmen's wages. And so in 1851, having been continued 20 years, it was given up. But by that time other periodicals and newspapers had been commenced, so that the Repository was no longer needed.

The work of Foreign Missions, with which I was connected, was almost unknown by the Chinese at Canton in the years to which my remarks refer. Indeed, that work can hardly be said to have commenced till after the conclusion of the Treaty of Nanking. As I have said above, Dr. Morrison's preaching in Chinese was only to his own servants and a few others who came to the service, as it were by stealth. And when he died in 1834 two converts were all he was known to have made. The fear the Chinese had of being in any way identified with foreigners was, indeed, intense. So afraid were they of being accused of having assisted us to learn Chinese, that I remember frequently there were Chinamen to whom I spoke Chinese and who knew perfectly well what I said, but who persisted in always replying to me in English. Mr. Thom talking freely with the Chinese who resorted to Messrs. Jardine's office did something to overcome this apprehension.

Residence in the factories was exceedingly pleasant. We all lived together on the most friendly terms, probably because we were so close together, and the interchange of social courtesies was most agreeable. And then when the Tea season had passed, and the summer heats assailed us, we started for Macao where we could enjoy the sea and the cool breeze, and could get a little more room to stretch our legs. At Canton our range for pedestrian exercise was rather limited. We could sail on the river in boats, but on shore we could only walk round the City at very considerable risk of being robbed. I remember taking such a walk with Dr. Bridgman, Dr. Bradford, and his brother, and at one part of our walk we were stopped and robbed without ceremony. We had, however, half expected such a thing and had not taken any valuables with us. It was, indeed, no uncommon thing for

those who ventured far into the back streets to be robbed; but no other violence was attempted. The country people were much afraid of us, but we always found that when we talked with them their fears were dispelled. But now when one looks back on the then state of things, he feels it difficult to understand how we should have been there so long and yet have known so little about the people, and been so little known by them. When Canton was thrown open to foreigners as late as 1858, some missionaries went into the City and found there Chinese who had never seen a foreigner; who had never heard that places for preaching had been opened by foreigners at Canton, and who did not think it possible that any foreigners could speak Chinese. And even at the present day at Peking, though the foreign Legations have been there for over ten years, there are districts in the City where the people have never seen a foreigner. For the Chinese, as a rule, are most unwilling to go beyond their accustomed bounds; and these people have never felt anything that made it necessary for them to go into the streets in which foreigners are likely to be met.

It is beyond the limits to which I have restricted myself in these remarks to speak of the changes effected in the life and trade of foreigners at Canton, by the stirring events of 1841-42 and '43. I may simply said that, in 1842, a Chinese mob burnt the East India Company Factories, which, however, were rebuilt in 1846. Those belonging to other nationalities were spared; but the whole of them were burned down by Governor-General Yeh in 1856. I was in Canton three days before this last fire took place, and Yeh then assured the foreigners that he would do no harm to them or their property; but it is quite certain that he had by that time determined on working the mischief that followed,—had, in fact, planned to set the factories on fire. In this fire all the works on hand previously printed at my Press were destroyed, amounting to less than 7,000 volumes. Still there is no doubt that the work done in Canton prior to 1841-42 was a good preliminary to what was to follow; and as we now look back on the course events have taken, I think it will be generally admitted that the gradualness with which the country has been opened has been best for both parties. It was above all things necessary that the dense ignorance which prevailed among the Chinese, of foreigners and every thing connected with them, needed to be dispelled by a growing acquaintance with them and their ways. More especially it was necessary that their minds should be disabused of the idea that,

though commerce and friendship might be our pretence, the real object at which we ultimately aimed was conquest. This was a very natural fear on the part of the Manchu rulers of China, for it was only supposing that we would serve them the same trick as they had served the Ming dynasty in 1644. I think that that fear may now be regarded as dispelled.

But when I came to Canton, such a fear had not yet been dreamed of. England, Spain, and Holland were still regarded as the insignificant States which they appeared to be as represented on Chinese maps; while, on the same notable evidence, they either believed that America did not exist, because it did not appear in their maps, or that, at all events, having no king, no fear need be felt as to anything she could do. But when, in 1841, the English fleet and forces proceeded up the coast, and Chusan, Ningpo, Shanghai, Chinkiang and Nanking fell, and Taku was reached, then the fear of conquest, suggested by their own history, became dominant in the breasts of the Manchu rulers, and they were forced to admit, at least to themselves, that foreigners were more powerful than they had supposed, and in their great ignorance they must have been at their wits' end what to do. But the experience gained by such leading men among the Chinese as Lin, Kishen, Keying, Ilipu, and others who had dealings with Elliot and Pottinger, must have been a kind of education not only to them, but to many others; and, as I review the growth of this knowledge from the time that the English Government began to deal directly with the Chinese Government in 1834, up to the present time, I feel convinced that this gradual development of the intercourse of China with foreign nations has been for her a source of safety and benefit.

No doubt Captain Elliot could easily have destroyed Canton in 1841; but he probably acted wisely in ransoming it. For many things had to be considered. First of all, the entire trade in tea was centred there and would have been paralysed for years had that emporium been destroyed. And then it was felt, besides, that the controversy was not with the Chinese Government. And so long as the latter felt their own immediate interests secure, they would have cared as little for the ruin of so distant a place as Canton, as they now care for the sack and pillage of towns by the Panthays of Yunnan or the Mohammedans of Kansuh. But by proceeding along the coast, the British Navy became the pioneer of British trade, alike by the knowledge it gained and diffused of

the navigation of the coast and the sources and trade of the country, as well as by the new and imposing views of foreign power and enterprise, which it made known over wide regions of China, where foreigners hitherto had almost never been heard of. When Admiral Parker took Amoy, in 1841, the people fled out of the place and were paralysed by fear; but when Dr. Abeel and Bishop Boone, both of whom spoke their dialect,—the one having learned it in Siam, the other in Batavia—went over to talk to them, the people came crowding round them wishing to know what the English wanted. And when they, evidently for the first time, heard the nature of the difficulty; they gradually came back to get particulars of the affair and its causes and no further difficulty was experienced with either people or officials. It was plain that it was only this ignorance that had made them unfriendly: as soon as they knew what our real wishes and objects were, all that passed away. It was immediately thereafter that Dr. Cumming established his Hospital there, which did much to reassure and attract them, and nowhere in China have the people been more uniformly friendly to foreigners than Amoy. But where no such opportunities were enjoyed, of knowing what foreigners really are and wish for, we need not wonder that we are misunderstood, feared and hated, and that mistakes have been made and very serious ones too.

In these desultory remarks, which might be indefinitely prolonged, I have endeavoured to give some idea of the position which foreigners held in Canton up to the war of 1841 and to recall those features of their social life which have most strongly impressed themselves on my recollection. And before sitting down I would reiterate my conviction that one great safe-guard of our intercourse with China has been the gradualness of its development. I have no doubt the opening of the Five Ports in 1843 was better than the opening of the whole country would then have been, filled as the minds of both people and rulers were with wrong ideas regarding us. And my hope is that as our intercourse continues gradually to become more close and general, it may continue to be for the general advantage of all concerned.

ARTICLE II.

THE LEGEND OF WÊN WANG, FOUNDER OF THE DYNASTY OF THE CHOWS IN CHINA.*

By THOS. W. KINGSMILL.

ON a former occasion† I had the honour of laying before the Society a sketch of the main legend of the Djow dynasty, and the reasons which influenced me in assigning to that legend an Aryan origin. I now propose to review one of the subsidiary legends surrounding the myth of the Djows, and to bring forward evidence that it also forms a part of the common heritage of the Aryan nations.

In the following I shall still confine myself to the legends of the Djow, leaving untouched those of the Yin, Shang and Hia; not because there is no instruction to be gained from a review of the earlier Myths, but because, till those of the later dynasty are in some measure placed in order, confusion rather than the reverse would be the result. The publication of Dr. Legge's translation of the *Ch'un Ts'ew*, with the valuable sketch of the early history and circumstances of the Empire prefixed, within the last few months is an event of importance towards a perfect comprehension of the state of China at the earliest period of authentic history. We see, so late as the end of the eighth century B.C. the Chinese nation struggling into being, and we can better understand the dependence of the several states of which it was composed on the central house of Djow, which exercised over the others a patriarchal rather than an effective sway.

The claim of the Djows to pre-eminence, was founded on their supposed descent as the eldest branch of the house, the rulers of the other states in most cases claiming descent from one or other of the children of the founder. The head of the lower house retains the name of Wang 王, in which we can recognise the Greek Αναξ or *Fαναξ*, with which besides the Chinese term is identical in meaning as in form; the other branches in proportion to their supposed elder descent, or greater or lesser importance, being the inferior titles of Gung, How, Bak or Dsze.

* Read before the Society on 26th March, 1873.

† 7th February, 1872.

On all sides the Djows were surrounded by alien nations, over which however by art or arms they were extending their influence; afterwards, by the superior force of character of the rulers of one of the states, the Tsin* 秦, a district which did not even attain to the dignity of an independent fief till the year 769, the old feudal state was overthrown by Djeng Wang 政王 in the year 220 B.C.; from which date commences the Chinese Empire.

As I pointed out in my previous paper, the legendary founder of the dominion of the Djows was the prince known as Wên Wang, a form represented by the characters 文王 or the Classic King. The form 文† is however in all the Archaic dialects of China pronounced Man or Mên, its initial *W*, there being reason to believe, is of late introduction in the Mandarin dialect. There is in this case no reason to believe that the character is used in other than a phonetic sense, and this taken in connection with the several forms of the solar Myth leads us to a still more curious development of the legend. Man Wang, we may fairly consider as the Chinese equivalent of Μαν or Μην *Fava*ξ a form which occurs in nearly all the Aryan tribes. Not to speak of Mên or Menes the first King of Egypt,—whose works in connection with the watercourses of that kingdom may be compared with those of the Chinese Yü, we have Manes the first King of Mœonia, Minos the celebrated King and lawgiver of Crete, Manis King of Phrygia, and the seventh Manu the father and lawgiver of the Indian Aryans; besides Mannus the son of Tuisco the progenitor and lawgiver of the Germans. So many names similar in their phonetic element have often claimed attention, but the phonetic resemblance forms only a small portion of the legend in each case. All, more or less, clearly claim a mythical origin. The Chinese, Man, is the head of the house of the Djows, the latter the equivalent, as I have shown, of the Greek Zeus or Sanscrit Diu; the Indian Manu bears the surname of Vaivaswata, or Child of the Sun, and like the Chinese King had ten sons; Minos the first King and lawgiver of Crete was the son of Jupiter himself by Europa; while Manes of Mœonia the founder of the Lydian Kingdom was a son of Zeus and Ge the earth, marrying Callirrhoë the "fair fountain" daughter of Okeanus. Mannus again in Teutonic legend is son of Tuisco the Zeus of the Teutons. So much for the general agreement. The *Shi King* shows that the ancient Chinese legend

* Prolegomena to Dr. Legge's *Ch'un Ts'ew* pp. 110, 111.

† Cnf. Greek Μηνυω to indicate, &c.

of Man was of a similar nature; that Man was in fact the divine, or semi-divine founder of the Kingdom of the Djows. Part III opens with an ode in his praise. "King Wan is on high, Bright is he in heaven—King Wan ascends and descends on the right and left of the Gods." "Profound was King Wan, continuous and bright was his reverence; Great is the appointment of Heaven. There were the descendants of Shang; the descendants of Shang numbered their myriads, when Shangti gave the command they became subject to Djow." He marries the Lady Sze 太姒, becomes Chief of the West, overcomes the Li country and finally hands over the government to his two sons, Dan and Fat, who in the far East fight the battle of Muk-ye and establish the Kingdom of Djow. His son Fat before the battle tells of him "King Wan was like the Sun or the Moon, his glory shone forth to the four quarters and to the western land. If I surpass Chow, it will not be my prowess, it will be the faultlessness of my father Wan."

Of Wan himself we learn but little more. His father was Ge liek 季歷,* (? Glaukus) by 太任 Tai jen (Saramâ). He was descended from the "Ancient Duke" Tan Foo 亶父 (? Danaus) who first civilized his people, and who "came in the morning galloping his horses along the banks of the western rivers to the foot of mount Ke." Here, Wan brought the neighbouring tribes into subjection by arms or by address. His armies advance along the Ging, while he marches on followed by his six hosts. As the Milky way is conspicuous in the sky so was King Wan

* I have interpreted these names phonetically as the Chinese characters fail to afford any clue as to their meaning. Glaukus in Greek Mythology is the son of Minos of Crete. He was drowned in a cask of honey μελιτος the equivalent of the Chinese 蜜 Mat (Vritra). Tai jen, in Cantonese Tai yum. Tai appears as the equivalent of Sanscrit Sâra in 太 or 台, great, eminent, as does 頭 tow, head, of Sira &c. As in the earliest Vedic legends 太任 or Saramâ was entirely virtuous. "When she was pregnant with King Wan, her eyes looked on no improper sight, her ears listened to no licentious sound, and her lips uttered no word of pride," (Chinese Classics, Note to Vol. IV, p. 433). The legend which culminated in the carrying off of Helen, her Greek representative, had not yet arisen. Tan foo's wanderings, his connection with the western rivers, and his final settlement in the plain of Djow may be compared with the similar incidents in the Myth of Danaus, (She King III, I, III). Another version of the Myth makes Wên the son of Tai jen without a father; Chang, the light of the rising sun, springs naturally from Tai jen or Saramâ the diffused light of the early dawn.

amongst men, ever active, giving laws and regulations to the four quarters. At the command of the Gods he attacked the men of Mat 密* (Vritra) who had dared in their disobedience to oppose him. The Mats invaded Yuen marching to Gung, where, on the summits of the hills they were driven back by the troops of Djow. Victorious over the Mats, the Gods direct him to attack Tsung-yung, in which feat, with the aid of his engines, he is equally successful. He builds, with the aid of his people, the Ling tai 靈臺, "Spirit mound;" forms a "Spirit park" 靈囿 Ling yu, where his does disport themselves; and a "Spirit pond" 靈沼 Ling djaou, full of fishes. Finally, having overcome his enemies, he builds his capital at Fung 豐, the *Abundant*.

With the Chinese, we may compare the Indian legend of Manu, noting however that the two characters of Manu, as the survivor of the Flood, and the progenitor and lawgiver, are divided in China between Wên Wang and the great Yü who founds the Hia as the former does the Djow kingdom and dynasty.

In the Indian legend the demon Hayagriva† having purloined the Vedas from the custody of Brama while the God was sleeping, at the close of the sixth Manwantara, the whole race of men became corrupt, except the seven Rishis, and Satyavrata King of Dravira. Vishnu prophecied a deluge to overflow the earth in seven days, and directed the King to take the seven holy men, their wives, and animals of various kinds, and enter into an ark. The King obeyed the instructions, and Vishnu as a vast fish tied the ark by a great sea serpent to his measureless horn and conducted it in safety through the deluge. The waters abated, he slew the demon, appointed the King seventh Manu, by the name of Vaivaswata or Sun-born. The King, happy in his preservation, stands praising the destroyer of Madhu, the equivalent of the Chinese Mat, referred to above, whose disobedience was by command of the Gods punished by the Chinese King. Manu afterwards, like the Chinese Wên, has ten sons, whose descendants replenish the inundated earth; he becomes the restorer of the laws promulgated by the first Manu, whose institutes like those of Wên

* 密 Mat, the name of this people, is only differentiated from 蜜 Mat, *honey*, by the radical, a matter of light moment in the Chinese legends. Madhu the evil demon, slain in the time of Manu is likewise the same form as Madhu sweet.

† Sir W. Jones Works, vol. I, pp. 287 et. imp. ed. 1799.

are handed down in Indian tradition to the present day; and like Wên founds the dynasty of the Children of the Sun.

Like the Chinese, the Indian legend seems divided into two. The words of the later Manu cannot be correctly understood without a reference to those of the first; as the Chinese Wên Wang is the completer of the work undertaken by the great Yü (whose name of 文命 Wan- or Man-ming is a further link in this story), so Vaivaswata is of that commenced by Swayambhura. Like Yü, Swayanbhura finds the earth covered with the primeval waters, he prays to Brama, and as the first act of divine favour obtains a boat containing the Vedas. He, his wife and the two Sages, Ulusku and Markundisya, enter and pray to Brama. Vishnu appears in the form of a boar and draws the ark with his tusks to a place of safety. From the ark he delivered the Institutes of Manu, and finally gave himself up to devotion, his sons and successors re-peopling the world.

The dynasty founded by Swayambhura, like that instituted by Yü, becomes corrupt, and in process of time the seventh Manu, like the Chinese Wên, appears to restore it to its primeval simplicity.

Greek Mythology has made a classic land of the island of Crete. We find that island originally inhabited by the Dactyli to whom succeeded the Curetes. These taught the people agriculture, the treatment of bees, and the sports of the field, as well as invented military weapons. Contemporary with them were the Titans,—Kronos, Hyperion, Koius, Iapetos, Krius and Okeanus. Kronos we find King of the island, succeeded by Zeus who divided between his own progeny and the Titans the government of the country. In another legend we find that Zeus had by Europa a son, Minos, the father of the civil polity of Crete which he professed to have derived from his father, whom he visited once in every nine years in a cavern in the island. Minos, distinguished in arms as in arts, pursues Dædalus to the coast of Cocalus, King of Sicily, where he perished through treachery. After death Minos occupied a post for which his life fitted him in a peculiar manner. He does not, like the Chinese Wên, become the adviser of the gods alone, but finds his station in Hades as the supreme and impartial judge of the departed.

Lydia has likewise for its first King, Manes, son of Zeus and Tellus, and as yet scarcely more than half mortal. He married Callirrhoë the daughter of Okeanus, who bore a son Kotys, whose

son and successor Atys, gave a patronymic to the race of Kings, the Atyadæ.

Even yet the list is not complete. We again find Manis amongst the most ancient Kings of Phrygia as a sovereign distinguished for his military valour and his virtue.

In Germany even, we find the same legend. We find Mannus, whose three sons were the progenitors of the German tribes, as the son of Tuiston or Tuisco, the Teutonic equivalent of the Greek Zeus, and discover that both father and son have become objects of worship with their descendants. In far distant Wales the same name is said to re-appear in Menw.

In Egypt, far removed as she was from the other countries mentioned, we find a development nearly as full of the same legend. Mên or Menes is the first mortal who rules over Egypt, and he is the successor of Horus the son of Osiris, the Egyptian Dionysius, and the correlative in many respects of the Greek Zeus. Here again we have a tradition of the primeval waters. Typhon induces Osiris to get into a chest which floated on the waters to Phœnicia. Isis his wife finds the chest, brings it back to Egypt, and conceals it till she can meet her son Horus. Meantime Typhon finds the chest, opens it and cuts the body into fourteen pieces which he distributes over the country. Isis takes an ark of papyrus rushes, and proceeds in search of the scattered members which she buries in the various localities, thereby accounting for the many burial places of Osiris. The connection of Osiris with the Solar deity, his concealment by the dark clouds, and death when the shades of night finally prevail over him, is one of the phases of the solar myth the most widely extended. I pointed it out in my previous paper in connection with Djow Gung, so that I need not now do more than direct attention to it. The other portion of the Egyptian tale runs parallel with the legends I have pictured above. Osiris, like Minos, in the world of shades, presides over the execution of rewards and punishments, and he and his wife and sister Isis become the progenitors of the human race. Mên immediately precedes his son Horus on the throne of Egypt, the first mortal who has ever sat there. He, like the great Yü in China, devotes his time to draining off the water from the land. Before his time, we learn from Herodotus,* the river flowed entirely along the muddy range of hills which skirts

* Book II, chap. 99.

Egypt on the side of Libya. He however by banking up the river at the bends, about a hundred furlongs north of Memphis, laid the ancient channel dry, while he formed a new course for the stream between the two lines of hills.

Such are some of the main phases of a legend which has prevailed from China in the East, to Wales in the West, and from the Teutons in North-Germany to the Egyptians in the sunny land of the Nile; co-extensive in fact with the limits of Aryan race or Aryan influence. Wherever met, Man is himself the progenitor, or closely related, as in Egypt, with the progenitor of the Aryan tribes; in every case he is more or less connected with the race of the Gods, and generally owes his origin to Zeus or his correlative. In Indian lore he is the offspring of the Sun; in Chinese he comes of the race of the Djows, identical with Djow 晝 the Bright Sky; in the Greek and German legends he is his immediate descendant. In Egypt he is sprung from Osiris, the analogue of the Græco-phœnician Dionysius whose name betrays his connection with the more purely Hellenic Zeus. He is in every case the author of the civil polity of the state. His institutes form the code of morals, which in many cases have survived to our own times, and in all cases he owes the origin of the institutes to direct divine inspiration. In some places, in Egypt and India, we find his name in connection with the great flood and the ark; in others, as in China, it is an earlier hero who rescues the earth from the realm of waters. India, in the legends of the two Manus, seems to connect the two, as China in the founders of the Hia and the Djows seems to separate them most widely. In such apparent discrepancies there is however no real difficulty; the extent of the divergence goes to prove the early origin of the legend. For its rise we must go back to the time when Djows, Arians, Hellenes and Teutons as yet occupied a common country and spoke a common language; a time to which tradition indeed points, but which history has as yet failed to enter. A time in fact of universal connection, when one family, rescued as it were by a miracle, was destined to populate and civilise the globe, and lay the foundations of that Great Aryan race which bids fair in a short time to conquer or replace all other tribes or manners of men.

ARTICLE III.

EXTRACTS FROM THE HISTORY OF SHANG-HAI.*

By the Rev. C. SCHMIDT.

THE site on which the city of Shang-hai and the foreign settlements are built was anciently called "Hu-tuh," or Fishing stake estuary. Here the Woo-sung river, now called by foreigners the Soochow creek, flowed into the sea. During the "Hea," "Shang," and "Chow" dynasties, or from 2000 to 500 B.C., it was part of Yang-chow, one of the nine provinces into which China was divided by the great Yü. It alternately belonged to the principalities "Woo," "Yüeh," and "T'su." After the feudal states had been amalgamated by "Chëh" hwang-ti of the Tsin dynasty, 246 B.C., "Hu-tuh" belonged to the district "Low," in the prefecture Kwei-chi. It remained so until the eastern Han dynasty, A.D. 25, when the district "Low" was transferred to the prefecture Woo, now Soo-chow fu. In the Leang dynasty, A.D. 502, the district "Low" changed name and was called Shing-i hien. It was also divided by the first Emperor of the same dynasty and the western half was incorporated with the district of Quen-shan. From this time until the Sung dynasty, A.D. 1000, Shing-i hien belonged to different prefectures, and "Hu-tuh" was a small unimportant mart, a rendezvous for fishermen. As already stated, the Woo-sung river, i. e. the Soo-chow creek, was anciently a large river; according to Chinese historians twenty *li* broad at "Hu-tuh." The Hwang-pu, as at present, ran east from Hwa-ting hien (Sung-kiang) as far as Ming-hang, whence it flowed north to nearly opposite Kaou-chang-sz *meaou*, when its waters took a north-easterly direction, and flowed into the sea independent of the Woo-sung river. Afterwards the Woo-sung river was connected with the Hwang-pu by a canal called the Fan-kia *pang*, running from where the Hwang-pu branched off near Kaou-chang-sz *meaou* to near the mouth of the Woo-sung river at "Hu-tuh." This canal was deepened and made wider during the reign of the Emperor Yung-loh of the Ming dynasty, A.D. 1403. From that time it lost its ancient name, having become a continuation of the

* Read before the Society on the 26th March, 1873.

Hwang-pu, and is that part of the river which flows past the city and settlements of Shang-hai. At the beginning of the Sung dynasty, the mart of "Hu-tuh," or then oftener called the port of Hwa-ting, was still an unfortified place, but on the site of the foreign settlements, between the Yang-king *pang* and Soo-chow creek, were two fortifications called *Loo-tzĕ ch'eng* or "Reed cities." Mr. Lang in his excellent lecture, "Shanghai socially considered," says that these fortifications were on the place where we at present see the British Consulate. This may or may not be so, still according to existing maps of that period I feel inclined to think that the one was more to the south, and the other certainly more to the west of the Consulate. Hitherto all vessels used to proceed direct up the Woo-sung *kiang* to a mart called Tsing-lung, about thirty miles west of "Hu-tuh;" probably not far from the present Wang-too. It was a place of great commercial importance, and therefore the place of residence of a Superintendent of trade. The river having gradually silted up and so become shallow and lessened in width, vessels were often obliged to unload at "Hu-tuh," thus taking away a great amount of trade from Tsing-lung. By the year 1080 Tsing-lung had already so lost in importance, that the Superintendent of trade was moved to "Hu-tuh" or Hwa-ting *hai*. From this year it changed name and was called Shang-hai, i. e. "Up from the Sea." Trade now continued to increase from year to year, and naturally with it the population, so that in A.D. 1279 the Emperor Chĕ-yüen, of the Yüen dynasty, or better known as Kublai khan, made Shang-hai the residence of a District Magistrate, calling the surrounding country Shang-hai *hien*. From that time Shang-hai has been an important place of trade, and through the addition of foreign commerce may at present perhaps be considered the greatest emporium of the far East.

While picturing to ourselves the place and the changes it has undergone from the earliest to our own time, our thoughts are naturally led to the people, who inhabited, and whose descendents still inhabit Shang-hai. Although as far as the features of the people are concerned we see the same sallow complexion, oblique eyes and black hair of their ancestors, we must, in order to get a clearer idea of the ancient inhabitants, represent them to our mind in a different dress from that worn at present, and minus the now much prized queue. The dress of the male population was a long gown reaching down to the feet, with wide sleeves, and fastened around the waist by the girdle; just such gowns as are now worn

by Buddhist and Taouist priests. All wore loose wide trowsers tucked into their stockings fastened by garters. They let their hair grow long, combed it back over the head and gathered it into a small knot. In the winter the clothing was wadded, and all wore a small round black cap, ornamented with a large knob. The different classes of the people could be distinguished by the color of their clothing; thus, the ordinary people generally wore black, the literati blue, and the Officials robes of various colors. The caps of the literati were also different from those worn by the common people. Hats, buttons and feathers were then considered as things only fit to be worn by the northern barbarians. The Officials wore caps of fantastic shapes, ornamented according to rank. The lady's dress was much the same as we see it now, though the colors were not so gorgeous. The houses of the people were also mostly one-storied. It is considered a special favor on the part of the present dynasty to allow the people to build two-storied houses.

A native of Shang-hai named Chang Chë-hiang, who lived during the first part of the Ming dynasty, gives the following testimony regarding his countrymen's disposition. He says, the people of Shang-hai, previous to his time, were peace-loving, industrious, filial and polite, engaged in trade, weaving, agriculture and fishing. The mercantile class he describes as timid, and consequently unwilling to go far from home for the sake of commerce. As to literary talent, he maintains his native town holds an honorable position among the cities in China. He laments a change in the manners and customs of the people from the reign of the Emperor Kia-tsing, A.D. 1520-30, through coming in contact with outside barbarians, or insular barbarians, who at that time came to Shang-hai. The people then became avaricious, given to fighting and brawling, reckless of life, and fond of dress and pleasure. Nearly all law-cases which came before the Officials, even those involving life, were based on false accusations, in fact honesty and straight-forwardness were nearly extinct. He says, the manservant could not be distinguished from his master, nor the maid from her mistress; all assumed the garb of opulent persons. As to distinguishing the literati from the people, this was impossible. A later writer, however, assures us that at the beginning of the Ta-tsing dynasty, the manners and customs of all classes of the people had become reformed. This he ascribes to the virtuous example of the then reigning Emperors and their Officers. The

literati again followed the path of virtue and duty, and the people again became industrious and frugal. Only the beggars remained intractable. They continued to increase from year to year, and became at last so troublesome, that in the reign of Kang-he special regulations were formed to keep them within bounds. Historians also accuse the people of Shang-hai of having always been addicted to extravagant expenditure on marriage and funeral occasions, which has caused the place to be a profitable field for Buddhist and Taouist priests. They are, however, very careful to exonerate their literary brethren from this charge by stating that these do not make use of the expensive Buddhist and Taouist rites on funeral occasions.

But Shang-hai with all its short-comings has produced some celebrated and famous men, of whom the people have every reason to be proud. These men have left works behind them, which cannot but call forth the admiration of all thinking men. From the time of the Sung dynasty to the present, nearly a hundred could be named who not only have excelled in literary talent and written many works of lasting merit, but who have also risen to high positions in the empire, and shown themselves to be good statesmen. I have therefore thought it not out of place to give a short biographical sketch of one, in whom was combined literary talent and statesmanship of a high order. This person is Sü Kwang-ch'i, or as the Romanists call him Paul Sü, whose name is more or less familiar to all foreigners who are acquainted with the history of China.

Sü Kwang-ch'i was born in the reign of the Emperor Kia-tsing about A.D. 1560. His father's name was Sü Sz-cheng, a respectable man, celebrated for his filial piety. Young Sü no doubt was trained to be diligent and virtuous by his excellent father. Having gone through the usual monotonous studies of a Chinese youth preparing for the government examinations, he soon succeeded in taking the much-coveted degree of Siu-tsai. Having mounted the first step to honor and fame in his country, he continued to study arduously to obtain the degree of Kü-jen. His desires were not fulfilled till his thirty-eighth year, A.D. 1598, the twenty-fifth year of the Emperor Wan-lih. Seven years later he became a Tsin-sz' and shortly after a member of the Han-lin. Previous to this time he had made the acquaintance of Matthew Ricci, the celebrated Jesuit Father, with whom he translated books on Astronomy, Mathematics, and the use of fire arms as then known

in western countries. After this he was mostly engaged in the revision of the Calendar and making books, in which he embodied a great deal of what he had learned from Ricci and other Jesuits of that period,—especially on military tactics, agriculture and engineering; also a work on the salt trade. While Sü was engaged in literary labors, China was far from being quiet. The Tartars were becoming very troublesome, and the Chinese troops had sustained a severe defeat. The capital was threatened by them, and the people were filled with consternation. In view of the danger in which Sü saw his country, he felt that he must do something, and accordingly memorialized the throne, advising the Emperor to raise more troops and suggesting various methods to accomplish this object in the most expeditious way. The Emperor, pleased with Sü's memorial, made him an Imperial Censor and ordered him to proceed to Tung-chow near Peking to raise troops and put his suggestions into practice. Sü at once set out and used all his energy to form a corps of troops. While thus engaged he from time to time urged new suggestions on the goverment, all with the view to strengthen the defences of the empire. He advocated the arming of the people and general reform in military affairs. His advice, however, was not so readily heeded as he had perhaps imagined, and he became disappointed, impatient and disgusted. He saw his pure patriotism was not appreciated, and he was on the point of retiring from the service when the Emperor died. This inspired Sü with new hope, and he once more sent a memorial to the Emperor H'e-tsung, who had ascended the throne. He was again destined to be disappointed, wherefore he reported himself sick and retired from the army. Sü had scarcely retired when the Tartar prince T'ai-tsung took possession of Liaou-tung, making great advances and pressing the Chinese very hard. The Emperor in this extremity recalled Sü to active service. He had scarcely entered upon his duties when he again addressed the emperor on military reform. He recommended the immediate casting of large guns for the defence of walled cities and other fortifications. His advice was followed and he grew very popular, which as often is, so in his case proved to be the prelude to a downfall. A member of the Board of War, named Tsuy King-yung, and his friend Chow Chaou-lin, a Censor, became jealous of Sü's popularity and importance, and therefore contrived to bring a series of false charges against him, whereupon he for the second time retired into private life. The Emperor, notwithstanding, appointed him to be Secre-

tary of the Board of Rites, which place he filled for two years, when he was suddenly stripped of all rank through the intrigues of a eunuch, named Wei Chung-hien, A.D. 1626. He remained so until the Emperor Tsung-cheng ascended the throne, A.D. 1628, when he was again restored to his former rank, and was soon after promoted to a higher position, in one of the Six Boards. At this time the imperial treasury was empty, and the Empire threatened by the Tartars from without, and powerful bands of robbers from within. The Emperor therefore invited his high Officers to suggest a remedy. Sü was not behind in tendering his advice to get the imperial exchequer replenished, and so give the government the means of keeping the invaders out of China proper, as well as of putting down the rebellious subjects. He recommended that every encouragement should be given to the agricultural part of the population, and that salt be kept a strict government monopoly. The Emperor now made Sü a member of the Board of Rites. The imperial astronomers having miscalculated the time of the eclipses, Sü was called to examine the matter. He reported that so long as the astronomers would persist in following the system of calculation used in the Yüen dynasty, such mistakes would be unavoidable. He recommended that this system should be revised with the aid of foreigners from the west, and several Jesuits, among whom was James Rho, were invited to take part in this work with Sü. Shortly after this, Sü was appointed Inspector General of Gabel. In the fifth year of the same Emperor, A.D. 1633, he was made a Grand Secretary of State, Senior Guardian of the Heir apparent, and Keeper of the imperial library. He only enjoyed these honors for one year when he died, A.D. 1634, ten years before the downfall of the dynasty which he endeavoured with all his power to uphold. The imperial Censors having reported to the Emperor that he had died poor, the funeral expenses were ordered to be defrayed out of the imperial treasury; his family also received aid. The posthumous title of *Wen-ting kung* i. e. "The Elegant and Resolute Duke" was bestowed upon him. The Emperor having expressed a desire to possess Sü's manuscripts, his son presented them to His Majesty. Among his many writings was a work called the *Nung cheng ch'üen shu*, "Thesaurus of Agriculture," in 60 books, which was published by imperial command six years after the author's death. For particulars regarding Sü's publications and writings, see Wylie's "Notes on Chinese Literature" pp. 76, 87, 88, 95, 139 and 140. There is a large stone monu-

mental arch at the foot of the Fow-min *chiaou*, about fifty yards South of the Shang-hai *hien's yamen*, perpetuating the fame of Sü Kwang-ch'i. Also on the same street near the great South Gate there is a small temple in his honor, called the Wen-ting-kung *sz*, wherein an image may be seen representing Sü. His grave is at *Sü-kia wei*. None of the Chinese historians mention anything about Sü having embraced the Christian faith, and as far as I have been able to discover his descendents adhere to the popular religions of China. From the tenor of some of his writings, however, there is reason to believe that he was a convert. That he was intimate with some of the Jesuit Fathers is readily admitted by the Chinese.

I will only briefly refer to a few of the other celebrated men which Shang-hai has produced. Wang Ch'i, who lived in the sixteenth century, wrote a supplement to Ma Tuan-lin's great work the *Wen hien tung k'aou*. He also compiled a work, in 106 books, entitled *San tsai t'oo hwuy*, i. e. "Cyclopædia of Arts and Sciences."

Contemporary with Wang Ch'i lived Luh Tseeh, who completed the *Ku kin shwo hai*, in 142 books, which Mr. Wylie says, is divided into four parts comprising respectively,—Eclectics, Repositories, Digests and Thesauri.

Another author was Chu Hwa, who lived in the eighteenth century and wrote a treatise on the cultivation of cotton. For particulars of these works see Mr. Wylie's "Notes on Chinese Literature" pp. 55, 56, 76, 77, 137 and 149. There are many other celebrities, but these must suffice as proof that Shang-hai can lay claim to having produced some extraordinary men.

The Shang-hai ladies also take a prominent place in history. Hundreds of them have their names recorded for virtue and filial piety.

Like all ancient places, Shang-hai has had its times of prosperity as well as adversity. Although trade has in general been flourishing since the Sung dynasty, owing to its naturally favorable position, yet there have been checks, and the people have passed through many severe trials and troubles. We only need to recall the continual wars between the feudal states, and the commotions at every change of dynasty. But passing by these wranglings, we confine ourselves to a description of what Shang-hai suffered during the Ming dynasty, before it was a fortified city.

In the seventh year of Hung-woo, the founder of the Ming dynasty, A.D. 1361, the Japanese commenced a series of raids on the

maritime provinces of China. In Chinese history they are described as pirates, and certainly their proceedings warrant their being so called. It is, however, a well established fact that these raids were not private enterprises, but conducted by the Japanese government. When the word pirates is employed, therefore, it is simply an expression used by the Chinese historian. For some time these had carried on a system of plunder without meeting any resistance, owing probably to the then new administration being too much engaged in consolidating its own authority. Emboldened through this inactivity of the Chinese government, they at last sailed a considerable distance up the Yang-tze and commenced their depredations. This was coming too near the Dragon throne, and Hung-woo at once ordered the Baron, Tsing-hai, to proceed with a well equipped fleet to punish these bold adventurers. On the approach of Tsing-hai and his squadron, the Japanese withdrew, but they were pursued as far as the Loo-choo islands, where it came to an engagement in which the Japanese were defeated, and the greater part of their ships captured and taken to Nan-king. This by no means cooled the ardour of the island braves, for in the sixteenth year of the Emperor Yung-loh, A.D. 1419, they again appeared, and landed at Kin-shan, a city fifty miles south of Shang-hai. Some troops under the General *How-Tuan* were at once dispatched there, and a hard battle was fought in which the Japanese were routed, and the greater part of their ships burnt. Though the Japanese were prevented from advancing nearer Shang-hai, they kept the port in a state of blockade to a certain extent, and trade suffered considerably, while the people were not a little alarmed. Commercial affairs were again disturbed in the reign of the Emperor Chin-teh, A.D. 1513; this time not by the Japanese, but by native pirates. These free-booters carried on their work of plunder to an enormous extent, and defied the imperial army and navy. The most renowned and powerful of the piratical chiefs was Lin Tsih, who after having for some time blockaded the entrance of the Woo-sung river and Yang-tze-kiang, assembled his fleet at Lang-shan, contemplating a raid on Shang-hai, where a famous chief of a band of robbers was secretly waiting, to co-operate with him the moment he should arrive. No sooner had the news reached the mart that Lin Tsih was coming, than all was alarm and confusion. Trade was entirely suspended, and all classes prepared to leave at a moment's notice. The news had only preceded Lin Tsih by a few hours; he was already approach-

ing the mart; the imperial fleet and army retired, and the Officials and people fled in haste, leaving the place to the secreted band of robbers. Lin Tsih had scarcely arrived at Shang-hai and was just preparing to land, when a typhoon arose, which obliged him to run for sea room. After the storm had abated a little, the imperial ships went in pursuit and even succeeded in surrounding the piratical fleet. None of the imperial ships, however, ventured to come close, so that when the pirates perceived their cowardice, they made a combined effort, broke through the cordon and escaped.

A similar attack was made on Shang-hai, about A.D. 1522, under a piratical leader, named Shë Tsung-li. His band confined themselves to plundering the shipping, but Shë Tsung-li was soon captured and decapitated at Woo-sung. These troubles were only preludes to what the people of Shang-hai were to suffer a few years after.

In the twenty-first year of Kia-tsing, A.D. 1543, the Japanese again appeared in great force. They landed at Paou-shan, ten miles north of Shang-hai, and at once commenced their work of plunder. The Commander at Woo-sung led out his troops to drive them back, but without success. The Japanese were victorious; they killed the imperial General and dispersed his troops. A new army was sent from Shang-hai under Tai-Ts'ang, which, though fighting bravely, met with the same fate as the Woo-sung troops. The Japanese now came up to Shang-hai, but kept north of the Woo-sung river, ravaging the country in every direction, and capturing a number of richly-laden vessels. Having well scoured this part of the country, they retired with their booty, and embarked to go round to Nan-wei, a city on the sea-board twenty-five miles south of Shang-hai. There they effected a landing, and under their leader Hsiang Hien advanced towards Shang-hai. An expedition was fitted out under the command of General Li Foo and his son Li Hiang. They crossed the Hwang-pu in order to meet the Japanese. For a time they checked the advance of the piratical forces, but ultimately it came to a pitched battle, in which the Japanese were victorious. The Chinese forces were completely routed, and Li Foo and his son were left among the slain. The Japanese now seeing their road clear, advanced on Shang-hai in two divisions, respectively led by Hsiang Hien and Teng Wen-kün. The imperial General Liu Pen-yüen, who had been left with some troops and gunboats at Shang-hai, made a last effort to keep them from crossing the Hwang-pu, but the news of

the fate of Li Foo's army had so discouraged the troops, that they soon gave way before the Japanese, who effected a landing at the northern *Ma-t'ow*. Now confusion ruled supreme. The Officials were the first to run away, leaving their yamens to be plundered. The people followed the example of the Officials and soldiery, and soon the Japanese were left alone to carry away all the valuables they could find. They did not destroy many houses, but were satisfied with carrying off merchandize and other valuables. Scarcely had the people commenced to come back to their desolated houses, when suddenly these piratical forces again made their appearance at Kaou-chang-sz *meaou* to the south of Shang-hai. The imperial troops at first made some resistance, but soon retired, beaten, and an order for reinforcements was sent to Kiang-yen. The moment these arrived the Japanese retired, though not without carrying with them a rich booty. Thirteen days later, they again came in full force, having a fleet of three hundred vessels, which extended from the sea to Chow-pu a village on the Hwang-pu thirty *li* south of Shang-hai. The two Generals Woo Shang-wen and Sung Ngan fought bravely to keep them from landing. Not until both Commanders were killed, and their forces cut up, did the Japanese succeed in getting a footing on shore. They now commenced their diabolical work in good earnest. Many of the people trusting to the strong forces of the imperialists, who had arrived from Kiang-yen and the province of Kiang-si, had remained at the mart. These had to suffer terribly. Young and old, male and female, all were put to the sword. The place having been sacked and gutted was set on fire, and Shang-hai was burnt to the ground. Sad and desolate did the but lately flourishing mart look. A Chinese ode describes the place at that time as full of the odious breath of thieves and robbers. No sounds to be heard excepting the heart-rending moans and cries of the miserable and unfortunate; a place where foxes roamed to gnaw the bleached bones of the slaughtered inhabitants.

Chinese historians inform us that the successes of the Japanese were owing, in a large measure, to some black slaves, and white devils in their service. These black slaves they describe as very demons, able to use swords, spears and fire-arms with great dexterity and skill, and who showed no fear of death. The white devils no doubt were Portuguese, who seemingly carried on their slave trade in the far East at that early period. The Chinese historians state that the Japanese paid high prices in gold for these black slaves.

In order still more to excuse the defeat of the Chinese troops, it is stated that the forces from Kiang-si were disaffected, and would not fight, because the Shang-hai Magistrate was unable to supply them with sufficient snakes and dogs' meat, their customary rations. These and many more absurd excuses are brought forward by the Chinese, to hide the weakness of their government. To conclude this sad picture of the sufferings of the people of Shang-hai it is only necessary to add, that from this time the Japanese did not again trouble Shang-hai, though they hovered about the coast from Canton to Shantung, till nearly the end of the sixteenth century, and it was only by treacherous stratagem that the Chinese got rid of them.

This then is a brief outline of what Shang-hai suffered at different times for a period of a hundred and eighty years during the Ming dynasty. To get an approximate idea of these sufferings, we need only to recall the time when the Triads occupied Shang-hai, and the Taipings were carrying on their devastations in this province. Shang-hai soon recovered, and to prevent similar disasters, a wall was built around the mart. The building of the city walls was commenced A.D. 1544.

A brief notice of a few of the still remaining ancient buildings, and places in and around Shang-hai, which have been silent witnesses for centuries to its prosperity and adversity will conclude this paper. The most ancient building and most prized by the people of Shang-hai is the Lung-hwa pagoda and adjoining temples. For centuries this has been the place where the people have gone to worship, at least once a year, especially during the days of *Tsing-ming*. No one in Shang-hai could have failed to see the thousands of pilgrims going to the place at that time loaded with incense and mock ingots. According to tradition, in the reign of the Emperor Chang-woo of the after Han dynasty, A.D. 221, a certain prince stayed for a night in his boat near the present site of the pagoda. He saw a bright light ascending to heaven out of the reeds near the banks of the river. For this reason he ordered a temple to be built there, calling it the *Lung-hwa sz* i. e. "The Temple of the Dragon's splendour." Another and more reliable account says that the pagoda and temple were built in the Tang dynasty, A.D. 800. It is recorded that as early as A.D. 1064, the Emperor Ch'i-ping of the Sung dynasty, presented the temple with a magnificent door tablet. The buildings were destroyed during the later part of the Yüen dynasty, and again rebuilt by

Yung-loh of the Ming. It suffered again, in the reign of the besotted Kia-tsing, from the Japanese, but was again restored through the exertions of the priest T'ai-ling, who collected the necessary funds. It was again renovated by order of the Emperor Wan-lih, and twice during the present dynasty. It has often been favored by imperial donations. An Empress-dowager of the Ming dynasty sent presents of gold, silver and fine robes to the priests, and a large new idol with a beautifully embroidered curtain.

The next ancient building is the *Ching-ngan sz* i. e. "Temple of silent repose" near the Bubbling Well. This temple is said to have been built A.D. 250. It is the well, called by the Chinese "The bubbling fountain," which gives the temple its celebrity. Formerly there were extensive marshes around the place, through which flowed a canal. In this canal was a bubbling fountain, so called on account of the water bubbling without intermission. It was also called "The eye of the sea." Persons who bathed near this place found the water quite warm about three feet beneath the surface. Though the canal gradually disappeared, the fountain remained. There was once a pavilion over the well with the inscription "The fountain that bubbles towards heaven." This was built by Taoutai Sheng Paou in the reign of Kien-lung, A.D. 1778.

"The hill of pots" *Ping Shan* is another place of note. It is not far from Ming-hang near the village of Peh-chiaou chin. According to tradition a military Commander of the Tsin dynasty, A.D. 300, used to give wine feasts to his soldiers here. In this manner enough of wine pots were collected to form a small hillock, about a *mow* in extent and twelve feet high. Some ascribe this to the King of Woo-yüeh, and others to a General of the Sung dynasty. The hillock is said to be there now near a Taouist temple i. e. "Temple of clear perception" *Tsiang kwan sz.* The people call the pots obtained thence "soldiers' pots," and prize them highly. Flowers planted in them are said to thrive in an extraordinary manner. Near the temple door is a well called the *Tien i tsing* i. e. "Heaven moved well." This well is said to have moved suddenly several feet nearer the river during a thunderstorm which occurred in the reign of the Emperor Wan-lih, A.D. 1584. Since then its water has been very sweet. There was also formerly the *Yü hsien t'ing* i. e. "Fairy meeting pavilion." It appears that the grand-father of a man named Sung there met with a Taouist priest, who gave him something to eat which he immediately ejected. From that time he never had hunger, though he

lived to be a hundred years of age. To commemorate this meeting a pavilion was built.

In the city of Shang-hai the temple of the City-God calls for attention. Part of it was originally the ancestral hall of an Officer of the Han dynasty. It was made the temple of the City-God in reign of the Emperor Yung-loh. The stone tablet, near the main entrance, with a small pavilion over it, was erected in the reign of the Emperor Tien-shun, A.D. 1438. The temple was destroyed by the Japanese, but was soon rebuilt, and has since been several times renovated. The gardens in connection with it were once the private property of a rich gentleman of the Ming dynasty, named P'an-eng.

In the Tea garden *Yü yüen* may be seen the *Yü-ling-lung* i. e. "Pearly grotto" surrounded by pools and curiously shaped rocks. It is stated, this grotto was constructed A.D. 1120, in the reign of the Emperor E-Ho. On its summit may be seen the two characters *Yü hwa* i. e. "Pearly splendour" and from it the house near it is called the *Yü hwa t'ang* or "Hall of pearly splendour." Not far from the pearly grotto are five stones of very curious shape standing erect. These are called the *Woo laou feng* i. e. "Peaks of the five ancients." The Shang-hai people often call the Tea garden by this name.

During the Ming dynasty some strangers from the west built in the literary establishment *Kin-yeh shu-yüen*, a small observatory, named the *Kwan-sing-t'ai* i. e. "Terrace to observe the stars." It was put together in a curious manner, and the steps leading up to it were of red stone on which the ecliptic, and equinoctial lines were depicted. Some say there are still stones of it to be seen, others maintain the contrary.

ARTICLE IV.

CHINESE FOX-MYTHS.*

By T. WATTERS.

IT is a trite saying, and one which few perhaps would contradict, that the Chinese are a peculiar people—having a language, institutions, and social observances utterly unlike those of western nations. Nor do I wish in any measure to dispute the general accuracy of the expression. The western man, who has long been climbing among the clear heights of knowledge, differs indeed very widely from the son of Han, who rests for the most part in unenquiring reverence on that uncertain border-land which is neither hill nor plain. Yet, after all, the high results of science are inherited in their completeness by a comparatively very small number, and we of the mass have to do our best in the way of slowly gathering wisdom with what humble powers we possess. Now, if we place ourselves thus as human beings, who are ever toiling and worshipping, puzzled from time to time through all our life by the unknown and apparently inexplicable ways of Nature, alongside of this Chinese people, we shall see, that while there is much in which we differ there is also much in which we agree. The pursuit of wealth, the desire for rest, the love of home, the mute instinct which whispers of immortality, are common to us all. Not only so, but even from the highest eminences to which we have attained we can still look back and see how our course lay long—very long—in the midst of those same low-lying mazes which still detain our Chinese brethren. Nor have we left behind us all the *insignia* of that early stage, on the contrary, we still retain traces of those primitive days when we too groped darkly after truth. Many an old fancy, many an old belief remain to us from those times; and many an act, and many a word once full of deep meaning and interest are at present an idle jest and a tinkling cymbal. Now these "survivals in culture"—to use Mr. Tylor's convenient expression—serve as the golden links which bind us with our own past, and with the present of many other nations. Thus, for example, tales of fairies, and elves, and hob-

* Read before the Society on the 18th April, 1873.

goblins are simple undoubted truths to us as children, just as they are to full-grown savages at present, and as they were to our own remote, less-civilized ancestors. As men, however, we now laugh at all these stories, or save them from contempt by converting them into Solar Myths. We still use in every day conversation words like *lunatic*, and *incubus*, and *Mercurial*, and *disaster*, but they may be compared to Achilles' sceptre, capable indeed of being wielded to purpose, but devoid of all the sap and freshness which once they owned, and incapable evermore of regaining the lost life—of producing again leaves and branches. If we turn to China, however, we find words like the above still possessing their native vigour, and tales of Genii and monstrous apparitions intimately bound up with a system of reason and belief. Such subjects are of acknowledged interest and importance, and they are capable of affording material for several considerable treatises. On the present occasion I propose merely to relate, as briefly as possible, some of the popular notions and legends current in this country respecting the Fox, and also to state, where I can do so, the philosophic basis which underlies or explains these fancies.

The usual term by which the fox is known in Chinese is *Hu-li* 狐狸. But this combination must originally have denoted two animals, for the *Hu* is a sort of fox, while the *Li* is properly a wild cat. The word *Li*, is found written in the two ways, 狸 and 貍, of which the former is that more generally used at present. In the Classics the words *Hu* and *Li* denote two animals, and Legge translates them, Fox, and Jackal respectively, the *Li* being explained as a small species of *Hu* or fox.* The native authors regard Reynard, the wild cat, the badger, the civet, and certain other animals, as very much alike, and they attribute to all, properties almost identical. So also in Japan, similar demoniacal powers and practices are ascribed to the Fox, Cat, and Badger.† This last, is, in China, as in the west, a relative of the fox, who sometimes transforms himself into one, and never plays on it, any tricks:—"Und nur Grimbart, den Dachs, den Sohn des Bruders, verschont' er." One author says, that the two live together in the same hole, though others make the Wild Boar and the Badger to live together, but have a separate mess. From its crouching habits the fox is sometimes called *Fu* 狱, that is, the

* See his Shu-ching, Vol. 1, p. 121, and Note.

† See Mitford's Tales of Old Japan, Vol. 2, p. 71.

"Croucher;"* and from the nature of its feet it is occasionally called *Niu* 狃, that is, the "Wry-footed." We also sometimes find the word *Ho* 貉 used, but this is properly confined to the badger. The phonetic 瓜 *Ku*, or *Ko* (now commonly *Kwa*), was used in framing the character for the fox, on account of the solitary habits of the animal, the same phonetic forming part of *Ku*, an "orphan," or, "the lonely one," but it is also said to be expressive of his cry.

The fox is said to be like a small yellow dog, with a sharp nozzle and a long tail; but there are black, and white varieties, besides a peculiar species with spots like cash on its tail. This last, and the white are exceedingly rare. The ordinary home of the fox, is a tomb, and he always prefers one of considerable antiquity. Otherwise he makes his hole in a mound, or hillock, or hides in the cranny of a city wall. During the day, he remains concealed in his hole, and comes out at evening to steal his food,—chickens, ducks, or whatever he can get. He emits a fetid odour, and his flesh is very disgusting, quite unfit to be used as food.

This animal seems to have been known to the Chinese from the earliest period of their history, and we find references to it, in all their ancient books. The *Shĭ-ching* alludes to his solitary habits, and this work, and the *Yi-ching*, make mention of him as an animal of ill omen.† In the passage of the *Shu-ching*, already cited, we read, that his fur, formed part of the tribute sent from Leang-chow, and the excellence of this fur seems to have become proverbial before the time of the Chow dynasty (about B.C. 1100). By the people of that period the fox was considered a very unlucky creature to meet, and one of the odes in the *Shĭ-ching* expresses summarily the ruin, and misery of the country, by saying, that nothing red was to be seen except the fox, and nothing black except a crow. Tradition, however, speaks of the existence of white foxes at the time of the Emperor Yü (B.C. 2200), and of that monarch having a lucky omen in the sight of one when he was seeking a bride. Afterwards these rare and beautiful creatures came to be regarded as of ill omen, but at the time of the Sung dynasty

* Professor Schlegel goes too far when he says, "En Chinois le rénard se nomme *fuh* 豸," for this is a term chiefly confined to books, and seldom, if ever, used by the people. The name *Hu-li*, or *U-li*, is known, and used apparently all over the Empire. See Sinico-Aryaca, p. 19.

† *Shĭ-ching*, *Kwo-fĕng*, Ch. 2, p. 36, 216. *Yi-ching*, under the Diagram 解 (䷧).

(A.D. 1127 to 1278), popular opinion about them had changed again, and they are now once more considered rather unlucky.* The appearance of a black fox, again, augurs the approach of universal peace and prosperity, among the people of the north. At present it is only when the ordinary fox comes into one's house, that he is deemed of bad omen, and no importance is attached to the encountering of one on the road, though Mr. Doolittle seems to intimate that in north China, the sight of a fox is considered a sign of good luck.† As a general rule, however, he is regarded as a creature of no good omen, and to be avoided rather than courted. For the Chinese, the rationale of the opinion is found in the fact, that he lies hidden during the day, and thus shows himself a lover, and large recipient of the dark, inferior, female constituent of the essential vapour of the universe. An illustration of this philosophic fancy is to be found in the passage referred to above in so early a book as the *Yi-ching*, where the three unlucky symbols are mentioned under the designation of the "Three foxes."

Chinese philosophers seem to agree in attributing to Reynard a very long life, some making the number of his years eight hundred, and others extending it even to a thousand. This power of prolonging life, they suppose to result from the animal's living in caves and holes, where it is shut out from the sun. The vital powers can thus operate free from disturbance and the wearing effect of the sun's heat and light. The fox, badger, mole and some other cave-dwelling animals are all grouped together as enjoying long life. The Chinese are not alone in thus regarding the exclusion of light and air, as tending to prolong existence. Not to refer to others, our own Bacon says:—"A life in caves and holes, where the rays of the sun do not enter, may perhaps tend to longevity; for the air of itself, unexcited by heat, has not much power to prey upon the body. Certainly, on looking back, it appears from many remains and monuments, that the size and stature of men were anciently much greater than they have been since, as in Sicily and some other places; and such men generally lived in caves. Now there is some affinity between length of age

* See the *Yuan-chien-lei-han* (淵鑑類函), Ch. 431.

† Social Life of the Chinese, Vol. 2, p. 457. "The keepers considered the presence of the fox an omen of good, and on no account would consent to have it hunted and killed."

and largeness of limbs. The cave of Epimenides likewise passes current among the fables."*

In the Chinese pharmacopœia, the fox occupies a very important position, and nearly every part of his body possesses a peculiar virtue. His blood is said to be pure, and a corrective of wine, keeping off intoxication. His flesh, when taken roasted or boiled, gives tone to the stomach, and the infusion made from it cures vertigo, temporary craziness and other ailments. All kinds of scabies, ulcers, fever, ague, and many peculiar affections are treated with the entrails, liver, or other part of this animal. His saliva, gathered in a decoy-jar, with narrow neck, and having a bait inside, is given as a love-potion to cold wives. The liver, dried in a sunless place, exposed for a little just as the Dipper is setting—at the 5th watch of the 5th day of the 5th moon—the period of the dark element's supreme ascendancy—then ground to powder, mixed with rice, rolled up as a pill in a piece of red silk, and held between the fingers, in the left hand for men, and the right hand for women, will cure or keep off intermittent fever.† In his heart is a small pill or pearl of a peculiarly bright whitish appearance and this is supposed to be the source of his extraordinary powers. The head is to be avoided, being the only portion, according to one author, which is poisonous. In another work we are told that the subtle essences of lead and tin make a fox.

A curious fancy, and one on which some light will be thrown hereafter, imputes to this creature the power of producing fire. Sometimes the tail is beaten on the ground and strikes fire and sometimes a flaming ball is seen in the animal's mouth.‡ So if the fox is offended, or in any way ill treated, he is wont to avenge himself on the wrong-doer by setting fire to his house. Thus a former Viceroy of Fuhkeen and Chekiang had his office, and war-junks, and all his possessions burnt by a fox, to which he had neglected to pay respect—though the story is that a greater crime was thus punished.

* Philosophical Works, Vol. V, p. 283, (Ellis and Spedding, Editors).—Translation of the Historia Vitæ et Mortis. It is interesting to compare Bacon's sentiments in this section with those expressed at the beginning of the section headed The Intentions, p. 265.

† 本草綱目, Art. 狐; also 廣事類, Art. 狐.

‡ 淵鑒類函, Ch. 431.

The fox's cunning is illustrated in the popular belief that when he is pursued he is accustomed to take refuge in one of the winding and narrow fissures, so often seen in the walls of Chinese cities. He feels secure there, as he knows quite well that no one will be so foolish as to break down the wall for the sake of driving out a poor vulpine refugee. From this is derived a proverbial expression of very common use by political writers. When an army is sent into a city or district, bringing with it all manner of turbulence and extortion, for the sake of punishing some contemptible offender, the man who does this is said to demolish a city-wall in order to unearth a fox.

There are countless other notions, and legends current in China respecting Master Reynard, some of them resembling the old folk-lore of the west. One legend tells how the fox became wearied of the constant state of fear in which he lived from dogs, and that observing how the tiger was dreaded by them, he attached himself, as an attendant, to that noble animal. By this means he obtained a dignity and importance, not to mention safety, which he could never have acquired alone. Hence comes the very common abbreviated expression "borrow the tiger's majesty," or, "falsely assume the tiger's majesty," which is applied to those who use their relationship or other connection with high and influential personages to add a false importance to themselves. Another story tells how the animals once agreed to attack and devour their common enemy, the fierce tiger. For reasons of his own, Master Reynard happened to have donned a tiger's skin, and so he was seized and eaten by the beasts. We read also of a nine-tailed fox, at present a heavenly constellation, but once an actual living animal. Its home was in the *Ching-chiu* (青丘) country, and it was wont to come thence to the capital, when peace and good government prevailed. Nor has it even now altogether deserted our earth, but always when men are all virtuous and the world in general is going well it revisits us for a time, coming, whence no one knows, and going, whither no one can guess.

Like most Western nations, the Chinese ascribe to the fox a cunning, crafty disposition, by which he can disarm suspicion on the part of the very animals which constitute his prey. Thus, they say, he comes on with a quiet unconcerned manner—looking gentle and innocent—among the domestic fowl, and these poor silly creatures, not suspecting him of meditating wickedness are easily caught. Reynard himself, however, is cautious and sceptical to

the last degree, having no belief in anything except the facts of his own experience. This suspecting faculty—this tendency to doubt and distrust everything—constitutes, according to one writer, the distinguishing excellence of the fox, just as other animals are good at sleeping, or possess varied remarkable virtues. The idea has become embodied in an expression which has long since passed into a proverb, and is constantly applied from man to man. Thus, when one wishes to say to another that he is absurdly hard to convince, or that he is distrustful beyond measure—that he doubts where a reasonable man would believe—he says, that he has a fox's scepticism (*hu-yi* 狐疑). This notion about the fox's caution, is put to practical use in the north of China, for it has been observed that when he is crossing a frozen river or lake, he advances very slowly and deliberately, putting his head down close to the ice and listening for the sound of water beneath. Accordingly when in the early spring the traveller fears the stability of the ice, if he observes on its surface traces of the fox's footsteps he may proceed without any apprehension. One can easily see what an opportunity is here again presented to the Chinese mind for the exercise of myth-making ingenuity. Below the ice is the region of the *Yin*, or female element—the dark world of death and obscurity,—while above it, is the region of the *Yang*, or male element—the bright world of life and activity. Accordingly it has come to pass that the fox is represented as living on that debatable land which is neither the earth of life, nor the hades of death. His dwelling-place on earth is among the tombs, or actually, rather, within the tomb, and the spirits of the deceased often occupy his body. Thus he enables the ghosts of the dead to return to life, or himself performs their terrible behests—visiting upon the living men and women, the iniquities they had committed against those now dead, and by this means bringing peace and rest to the souls of the latter, which would else be troubled and troubling for ever.

As the fox grows in years he grows also in wisdom, and not seldom in goodness. Thus he comes to be able to see into the future, and so prepare against impending evil. He inhales and amalgamates, from year to year, and from century to century, more and more of the subtler, more highly endowed essence of matter, until all his faculties and powers become marvellously purified and exalted. His bodily eyes can penetrate to the distance of a thousand *li* (about three hundred and thirty English miles), and his mental eye can pierce the night of a thousand years, know-

ing as well the past, as the future. So when the appointed time for his death arrives he has already foreseen and prepared for the event, and accordingly he experiences, what the Chinese call, a perfect, or correct death (*chêng-ssŭ* 正死). Knowing his end to be approaching he returns to his native place, lies down at the foot of a hill, with his face directed upwards, and his fore-paws extended and folded, and so he breathes his life away. If he is unable to reach his natal mound, he ascends a neighbouring height, and dies with his head directed towards the place of his desire. This notion is one of unknown antiquity among the Chinese literati and people in general. We find it mentioned in the celebrated commentary to Confucius's "Spring and Autumn;" and in the *Li-Chi*, or "Record of Rites," it is quoted as an ancient saying.* Here again we see the close connection between Mythology and language; for from this idea an expression was derived which has remained in general use up to the present time. To say that a man had a fox's death (*Hu-ssŭ* 狐死), denotes that he had lived all his allotted time, and that he departed calmly and decorously, obtaining a burial "in the places of his youth." The full expression is *Hu-ssŭ-chêng-chiu-shou* (狐死正丘首), that is, "the fox died correctly with his head on the mound." This, or a portion of it, is very frequently applied in the case of a mandarin dying at his post, but whose remains are brought home for interment, also to those who die gloriously, fighting against rebels or enemies. Can we see, it may be asked, in these seeming-wanton fancies, dark and almost obliterated, records of that primitive Mythology which called the twilight a Fox? Is not the twilight, whether of morning or evening, the mediatrix between the bright glory of day, and the dark obscurity of night? Born on the eastern hills in the morning, it dies at evening on those of the west, with eyes directed to its place of birth. The fire, which the fox is feigned to bear may be the russet clouds which appear in the horizon before sunrise, and after sunset. As, also, the twilight is sometimes soft and lovely, garnished with fair, bright colours, and sometimes plain and gray, clothing all things "in her sober livery," so, the fox, as we shall soon see, assumes at one time the form of a charming maid, and at another that of a sober scholar. Professor De Gubernatis says:

* *Li-Chi*, Ch. 2, p. 12. See also the *Kwang-shï-lei* as above. The fancy, and the phrase are both of frequent occurrence in popular Chinese literature. The *Li-Chi* has an interesting note in the commentary on the passage referred to in the text.

—"The fox is the reddish mediatrix between the luminous day and the gloomy night; the crepuscular phenomenon of the heavens taking an animal form, no form seemed more adapted to the purpose than that of the fox or the jackal, on account of their colour and some of their cunning habits; the hour of twilight is the time of uncertainties and deceits."*

Even, however, at the end of eight hundred, or a thousand years, the fox need not die. If he only use the proper means he can attain immortality, and become as one of the gods. Even in the ordinary course of his life he can transform himself and assume a human shape, and thus he comes to be regarded as a creature of superhuman power. Hence temples are raised to his honour, and worship paid to his supposed image or symbol; and hence the fear that hedges his name. This fear of the fox-elf is indicated in many ways, and among them is the recourse to euphemistic terms to denote, as well the fox itself, as the less substantial fairy. Thus the small shrines erected to his honour are frequently inscribed *Hu-hsien-miao* 狐仙廟, that is, "Fox-genius temple," thus ascribing to it blissful immortality. In some places, however, this title is given only to the guardian of the seals in a high mandarin's yamên, to whom reference will be made hereafter. But it is believed that as the sight of the character for fox, as well as the sound of the word, irritates the creature, and consequently recourse is often had to the following expedient. The character 胡 has the same sound as 狐, viz: *hu*, and it has nothing unlucky about it, except its sound. So in order to avoid writing up, not merely the character which actually denotes fox, but even one of a similar pronunciation, this character is divided into its two component parts 古 *Ku* and 月 *Yue*. And hence the small shrines to this sprite may often been seen with the inscription *Ku-yue-hsien-shĭ* (古月賢使), that is, "old-moon-sage-officer," an expression of course entirely without meaning. Yet, even in some of the official residences of the higher mandarins, this title is used to denote the Seal-chamber, so afraid are the inmates of using ill-omened words. It will at once be seen what a fine opportunity for myth-making is here presented.

* Zoological Mythology, Vol. 2, p. 122. It is of course still open to doubt whether the fox or jackal does ever represent the twilight; and we cannot be too cautious in turning popular tales and fancies into beautiful allegories.

Quite as interesting as the above, and better known than it, at Foochow, is the title *Kao-sai* (九使), meaning simply "Nine-officer." Under this title the fox-elf has arrived at the possession of godships very different. The fox is reputed to have nine transverse bars or nine joints in his tail, and the word nine here stands for *nine-barred tail*. *Kao-sai* then becomes the name of honour given to the male fox-elf, as *Niang-niang* (娘娘), meaning "Our Lady," is the euphemistic title of the female elf. Now the fox, as we shall see, can transform himself into a beautiful girl, and under this guise can charm and bewitch men. Accordingly the poor unhappy prostitutes of Foochow and other places, pray to this demon to give them favour in the eyes of men, and hence *Kao-sai* is called the god of prostitutes at Foochow.* But this is also the name of one of the attendants of the King of the lower world, whose function is to execute the shady monarch's orders by tormenting erring mortals. According to another account, and one probably of late invention, *Kao-sai*, the attendant of the Infernal King, was the son of a woman named *Liu* and a serpent-father. He lived at the time of the After-T'ang dynasty, and was one of three brothers. The mother was promoted to be an immortal and she became the goddess of parturition, according to some, or of small-pox according to others, while the three sons have a sort of roving commission to torment and plague all sinful men and women. Another euphemistic designation, not only for the fox-elf, but also for the fox himself, among the peasants in the Foochow district, is *Teong-wei* (長尾), that is simply, "Long-tail." When, however, there is no question of obtaining a favour from the elf, or of propitiating him, or even of showing him respect, he is spoken of by a title which has rather a slight savour of contempt. This, which is perhaps the most usual designation for the elf in and about Foochow, is *Hu-li-ma*, a name which indicates at once the vague, mystic nature of the creature, and its uncertain generation, being, as it is, a compound of fox, wild cat, and tame cat.

It is chiefly in country villages, among the lonely hills, and in all the homes of ignorant simplicity, that the terror of the fox-elf continues. He is worshipped chiefly with a view to conciliate him, and keep him away from the family—seldom or never with the hope of obtaining anything good. It is perhaps impossible to ascertain with any degree of accuracy when the practice originated.

* See Maclay and Baldwin's Dictionary of the Foochow Dialect, s. v. 九.

From the words of the ode in the *Shĭ-ching*, already referred to, we are perhaps justified in assigning to it a very remote antiquity. We have, however, historical evidence that it was very common at the time of the T'ang dynasty, which ruled from A.D. 618 to 907. The fox-elf was then treated very much as if he was a human being, having offerings of food and drink presented to him regularly. So universal was this worship, that it came to be a common saying among the people that one could not find an inch of ground without this elf.*

Let us now proceed to consider this animal in its capacity of sprite, or spiritual being, tormenting mankind. In several parts of Fuhkeen, and in other places, vertigo, madness, melancholy, and other bodily and mental derangements, are ascribed to the action of this creature. It is generally invisible to all, except the person afflicted, though occasionally it is seen by some friend or professional exorcist. Sometimes the *Hu-li-ma* only plagues the individual it haunts, by carrying off his cap, mislaying his books, spilling his tea, and playing other such antics.

Not long ago a perfect orthodox Confucianist told me of a friend who was thus annoyed. On one occasion this gentleman was proceeding to pay a formal visit at the house of an acquaintance, having with him a servant carrying his official hat. On reaching the place of his destined visit, the servant discovered that the hat was suddenly missing, so there was nothing for it but to return home. Here he actually found the hat in his own bed-room, the fox-elf having secretly conveyed it thither.

A countryman, from a village in the neighbourhood of Foochow, told me a few months ago of a relative whose son had been afflicted by this demon. The boy was pale and thin, and always unhappy: he did not care for his food or drink, and he enjoyed no amusement. His mother became distressed, seeing her darling child thus pining away miserably, and she called in a Taoist priest of local celebrity. The priest heard the child in his sleep cry out as if in fear of the fox and he at once prescribed the usual remedy for possession by the elf. This is simply a charm called the *T'ien-ssŭ-fu*, and consists of a mystical character written by Chang T'ien-shĭ, the hereditary head of the Taoists.† One morning he

* See the Cyclopedia *T'ai-p'ing-kwang-chi*, Article 狐.

† I have occasionally noticed the charm pasted up on the outside of a cottage which had been haunted by the *Hu-li-ma*. In the hill-districts near Foochow this is not infrequent.

brought the charm into the room where the mother and son were sitting, and at once proceeded to paste it up on the wall. At the very instant the charm was displayed the afflicted boy cried out—"There goes the fox—catch him." His eyes seemed to follow a form running out through the door and away to the hills, but he recovered his health and spirits and is now quite well. It is not always, however, for evil that this goblin haunts the sleeper. A relative of my servant is visited by a fox-genius who brings him money by night, advises him on matters of business, and who actually foretold a fire to him by preparing against which the man saved all his property. He sees the elf in his sleep as a pretty young girl, but on awakening he cannot discover any living creature, or at most, he gets a glimpse of a fox bolting through the window. Another instance, and one of a different nature, came under my own notice at Foochow. An old man of sixty years became deranged in intellect, and the form which his madness assumed was the conviction that the fox-demon was dogging his steps, and trying to pilfer his brain. One day wearied with his fruitless efforts to get rid of the incubus, he went to several friends in succession begging them to give him the *T'ien-ssŭ* charm. No one had it, and the poor creature became so distressed that he could not endure to live any longer. Accordingly he rushed into an opium shop and bought a piece of the drug which he instantly swallowed. During almost the entire time that elapsed between this act and his death the man kept crying out against the elf, and praying those about him to keep the evil thing away. The sorrowing son assured me afterwards that he heard the shrivelled sapless brain rattle within his father's skull.

It is the creed of many Chinese Pharisees, that this *Hu-li-ma* plagues only those who have lived bad lives, and committed great crimes. Many, indeed, say that he has only a subjective existence, and is the creation of a troubled imagination. When a man is seen to be followed by unnatural disaster, he is said to have fallen foul of the *Hu-li-ma*. This expression is also used of a man who is entering on a wicked course, who is engaging in some crime which is certain to bring its own retribution. So also when the life of a "False Semblant" is revealed, and all his secret villanies traced home to the hypocrite, the Chinese of Foochow say that the fox-elf's tail has draggled over all the ground.* The

* Maclay & Baldwin's Dictionary of the Foochow Dialect, s. v. 𠊎.

Hu-li-ma is of course often referred to without much fear or reverence, and indeed many turn it into jest. To children, naturally, it is always real, and mothers quiet their obstreperous offspring who cry during the night, by telling them that their noise will bring the fox-elf to the house.

I need scarcely remark that the Chinese are not singular in attributing to the action of demons and sprites diseases like vertigo, and epilepsy, and melancholy. When we speak of a person as "possessed" we ourselves are bearing unconscious testimony to the former existence of the belief in demon-brought afflictions. Nor can the time be said to have quite passed away when men among us would speak of dyspepsia, and anger, and sexual appetite as the work of our arch-enemy, or describe cholera and fever as "visitations." In old times, and among savages, the conviction is found in much greater force, and with more intense reality. "The belief," says Mr. Tylor, "prevailing through the lower culture that the diseases which vex mankind are brought by individual, personal spirits, is one which has produced striking examples of mythic development. Thus the savage Karen lives in terror of the mad "*la*," the epileptic "*la*," and the rest of the seven evil demons, who go about seeking his life; and it is with a fancy not many degrees removed from this early stage of thought, that the Persian sees in bodily shape the apparition of *Al*, the scarlet fever."*

A peculiar and intimate connection is supposed to exist, as we have already seen, between the fox and disembodied spirits. Even during a man's lifetime indeed, this animal can occasionally receive his soul, watch over him, and avert hurtful accidents. I remember that a few months after our Minister, the late Sir Frederick Bruce, had left a monastery, in the western hill near Peking, where he had been spending some weeks, a Chinese gentleman told me about the Minister's Guardian fox. He said that shortly after Sir Frederick came to the monastary, this fox took up his residence in an old pagoda situated in the immediate neighbourhood. I was assured that the soul of the Minister migrated into the body of this animal at night, and that so long as the fox remained there, it had been impossible for any mischief to befall the Minister. This Chinese gentleman, who was well read in classic lore, also informed me very gravely, that in accordance

* Primitive Culture, Vol. I, p. 267.

with ancient precedent the fox in question ought to have received the faculty of speech, but that he generously waived his right in deference to a human creature, and that a man who was known to have been dumb from his birth now became endowed with speech. When men are dead, their ghosts often go to reside in foxes, or use these animals as hacks, riding on them through the air and over land and water for enormous distances and with lightning speed. If a man has been murdered or driven by oppression to commit suicide, his vexed ghost not seldom mounts a fox and torments the wrong-doer even for many years—setting fire to his house, smiting his wife and children with fatal diseases, and sometimes driving the wretch mad, when suicide puts an end to his expiations in this world.

Another curious tradition about the fox, and one to which reference has already been made, assigns to him the guardianship of the seals of office, in the high mandarins' yamêns. The seal is generally kept in an upper room, set apart expressly for the purpose, and it is supposed to be under the special care of the fox, who is called the fox-genius (*Hu-hsien* 狐仙), while the building is called the "fox-genius upper room." Mr. Doolittle says:—"There is in connection with some of the principal yamuns, a small two-storied building, devoted to the worship of his majesty, Master Reynard. There is no image or picture of a fox, to be worshipped, but simply an imaginary fox somewhere. Incense, candles, and wine are placed upon a table in the room of the second story of this building, and before this table the mandarin kneels down and bows his head in the customary manner, as an act of reverence to Reynard, the keeper of his seals of office."* According to my informants, however, there is at least in the Viceroy's yamên at Foochow, a clay image of a venerable old man seated in a chair which represents the fox-genius. His Excellency comes to worship here on his assuming office, and also on the 1st and 15th days of every moon. This particular fox-genius has attained great celebrity, and he is now worshipped by many of the common people as well. It is very difficult to ascertain the origin of this strange fancy, which has taken a strong hold of the popular mind in many places. The yamêns are generally much frequented by foxes, and some say that as these animals never commit depredations within the walls, and as they must have come

* Social Life of the Chinese, Vol. I, p. 357. See also p. 288.

with some intention, the only probable supposition is, that they come to look after the official seal. Whether the high functionary believes or does not believe in the fox-genius he is obliged to conform to the old custom and pay him reverence, as Mr. Doolittle says. Neglect to do so would be highly resented by the people, and would, I am certain, lead to a popular manifestation of a very decided character.

Proceeding next to the transformations which the fox can undergo, we find that these are chiefly into old men, or scholars, or pretty young maidens. Occasionally indeed, he assumes the appearance of a horse, or other four-footed animal, but there are very few instances of this kind on record. The story of the genial scholar, who finding a fox in his bed gave him share of the blankets, and found that he was entertaining a learned and beneficent fairy has been made known already by Mr. Mayers's translation.* The Chinese work from which the story is taken,† contains many other tales of the transformation of the fox into a scholar. One of these tells of a gentleman who engaged a private tutor to reside in his house and teach his children. The tutor gave general satisfaction for a long time, but was considered a man of strange habits, and no one could understand why he went out every day towards sunset. After the lapse of a few years he asked the hand of his employer's daughter in marriage and was refused. He thereupon tormented the house by elfish tricks, but was finally beaten, and came to terms with the father. Another treatise tells of a well known scholar and teacher, who suddenly disappeared from his place of residence, and could not be found or heard of for a long time. At length on the 9th day of the 9th moon one year, some of his old pupils going to the top of a hill, according to the annual custom on that day, found a class of foxes listening to a lecture from one of their species on the top of an old tomb. At the sight of human creatures all ran away save the lecturer who was recognized by the men as their long-lost white-headed teacher.

I do not find that the Chinese attribute to the fox, in his capacity of sage, those Machiavellian tenets which the Hindoos

* See Notes & Queries on China and Japan, Vol. I, No. 3, p. 24. Mr. Mayers says:—"The superstition with respect to "fairy-foxes" is deeply rooted in the Chinese mind, and has endured, as Dr. Birch has noted, from remote antiquity."

† *Liao-chai-chih-yi* (聊齋志異).

ascribe to the jackal, its mythical representative with them. It is curious, however, to observe that in China, as in old Europe, a large amount of practical wisdom was imputed to this animal. We forget now, and indeed it was forgot many centuries ago, that Reynard is the Counsellor. Even in that interminable romance of the middle ages which bears his name he is merely the universal rogue; but there was a time when the word had a real meaning.

It is as a pretty girl, however, that the fox appears most frequently and does most mischief. Disguised as a woman, it is always young and handsome, generally wicked, but on rare occasions very good. At times it puts on the garb and appearance of some one well known, but who is either dead or at a great distance. An accomplished scholar, who resides in a village about twenty miles from Foochow, told me not long ago, a story, which affords an illustration of this personation of particular individuals. A friend of his had ill-treated and, as was supposed, secretly killed a pretty young wife and married another. Soon after this latter event, the house was reported to be haunted and no servant would remain in the family. The first wife's apartments were the worst of all, and this part of the premises had to be abandoned. Now one day my friend was reading with the master of the house in the works of *Chu-hsi*, and they came to the passage which treats of ghosts and spirits. They then ceased reading, and entered into a conversation on the subject, and the story of the haunted chambers was related. My friend laughed at and reproached the weakness which made a scholar believe in ghosts, and finally the two agreed to remove to that portion of the house, and continue their reading in one of the dreadful rooms. Before they had been long seated there, strange sounds became audible, and soon the pit-pat of a woman's steps was heard. The door opened without any noise, and in walked the murdered woman clothed as of old. The blood forsook the two men's faces, speech fled their lips, and had it not been for the law of gravity their pig-tails would have stood on end. There they sat, paralyzed with mute awe, and gazing on the spectre which went pit-pat over the boards, looking neither to right nor left, until it reached the corner in which was a small wash-hand stand with a basin of water. She took the basin in her hand and walked steadily with it over to the man who had been her husband, presenting it to him, when he instantly uttered a terrible scream and fell back-

ward. Then the spectral woman walked away and her patter was heard along the boards until she reached the outer door. My friend summoned up courage to go out and make investigation, but no human creature had been stirring, and only the fox which came almost daily had been seen on the premises. The house has been abandoned, the owner has gone elsewhere, but my friend believes that the ghost of the murdered wife will torment him by means of a fox-fairy, until it brings him to the grave.

Sometimes a man marries what he thinks is a fine pretty woman, but finds that she is a genuine fox—an experience I believe scarcely confined to China. Thus one individual fell in love with a beautiful girl whom he had seen on the road, and he took her to wife. She lived with him happily enough for about three years when he began to wonder why she never undressed on going to bed. So one night as she slept beside him he gently uncovered her when he discovered to his horror that she had a tail three feet long. *Cauda de vulpe testatur*, and so the poor man arose and fled. This fairy had originally gone about dressed very gaily with a profusion of jewelry and gawds. Hence arose the common term still in use for a woman who dresses lavishly and without taste, namely, *Hu-li* or fox. This epithet is also applied to those females who are tatlers and scandal-mongers—filchers of their neighbours' reputations, just as in our own countries the ladies have a happy way of calling each other *vixen* or *she*-fox.

In the *Liao-chai*, is a very beautiful story of one of these fox-wives who lived for many years with her husband. This was a remarkably kind fairy and always exerted her power for good, except to those who called her "Old-fox." Often, however, the elf comes by night to a man and extracts from him as he sleeps all his manly vigour. The *Hu-li-ma*, to use the Foochow name for the demon, steals into the bed-room and worries the sleeper, exhausting him gradually until he dies. It is interesting to observe how similar notions are current in Japan, and other Eastern countries about the Cat; and the legend of the Vampire cat of Nabéshima has a close resemblance to many that I have heard in China regarding the *Hu-li-ma*.* This last, it must be remembered, is a creature of mixed generation partaking of the nature of the cat, no less than of the fox.

* See Tales of Old Japan, Vol. II, p. 73. Compare also Zoological Mythology, Vol. II, p. 61.

But our friend is not always satisfied with the simulation of human forms, for he has been known to venture among the gods and to represent himself as one of these come down to dwell among men. Thus on one occasion he assumed the form supposed to be that in which the future Buddha is to come, and gave himself out as that long-expected Messiah. He made many believe on him, but was at length exposed by a learned monk, who convinced him of having made the mistake of coming before his time. On another occasion the fox transformed himself into a goddess, and led very many astray. The imposition was in this case also detected by a monk, who had acquired the faculty of transposing his soul in whatever place he pleased. The supposed goddess was called on to say where the soul went and she succeeded perfectly until the soul was sent to heaven, when she confessed herself beaten and resumed her vulpine form.

This is nearly always the upshot. No matter what is the disguise which the fox assumes, or what the artifices to which he has recourse he is generally beaten and obliged to return to his brute condition. Sometimes it is his ignorance, sometimes his tail, sometimes the brightness of day which betrays him. Finally, indeed, he may escape by the pretext of going to the Holy Land, that is, to the fabled region of the immortals, but most frequently he has to tuck his tail between his legs and scamper off, a mere fox, to his natal tomb or mound.

The next point is the detection of the latent fox. How are we to know for certain that when we are talking to what is apparently an eccentric old book-worm, or making love to a charming young beauty, we are not being imposed upon by cunning old Reynard? Now there are many devices for compelling a disguised fox to resume his proper shape, and the "*animi sub vulpe latentes*" need not long deceive us under any circumstances. I have already mentioned the mystic charm prepared by the head of the Taoist sect, which drives away the fox-demon when he comes invisible to all save the creature whom he is afflicting. There are, however, various expedients for exposing the animal when ordinarily visible. Thus the sacred metallic mirror of the Buddhist monk, when presented to the fox-lady causes her to resume her proper form instantaneously. Again the *Pa-kwa*, or figure formed by eight combinations of three divided and undivided lines, which plays such a very important part in Chinese philosophy, will drive off a fox-elf as surely as holy water will expel the devil. There is another de-

vice of a very peculiar nature, and one which is believed in almost everywhere throughout China. The fox, it is said, has not the power of transforming himself into a human being until he is well advanced in life, according to some, three hundred years old, and according to others eight hundred or a thousand years old. Now if one has reason to believe that a particular creature is a fox in disguise, he has only to bring the individual with him and confront him with an old stone pillar, tree, or other object of the same antiquity, whereupon the fox, if such he be, will at once resume his natural appearance. An old pillar or other stone monument at a tomb, is considered as specially efficacious under such circumstances, and the following is the philosophical explanation of the matter. The male and female vaporous essences of matter are, as we have seen, diffused everywhere throughout the world. All objects, animate and inanimate, are constantly being influenced by these subtle essences, and receiving them into their constitution. Accordingly it comes to pass that in the lapse of ages these long-lived objects have accumulated so much of the primordial virtue of matter that they themselves become endued with mystical power, and are capable of exercising an influence over the unseen agencies of the world. Hence comes the reverence which we find everywhere in China paid to old trees, and rocks, and mountains, and rivers, and hence the magic influence which these exercise in conquering such abnormal apparitions as fox-elves. This is one of the many instances in which we detect the beautiful thread of Pantheism which winds through all the systems of belief and philosophy in China. Here also we have a link which binds the philosopher with the savage. The Chinese sage weaves unconsciously into his cosmological web, gossamer threads spun by nature's children while still unvexed with the problem of finding unity in the midst of multiplicity. Tylor well remarks—"Animism takes in several doctrines which so forcibly conduce to personification, that savages and barbarians, apparently without an effort, can give consistent individual life to phenomena that our utmost stretch of fancy only avails to personify in conscious metaphor. An idea of pervading life and will in nature far outside modern limits, a belief in personal souls animating even what we call inanimate bodies, a theory of transmigration of souls as well in life as after death, a sense of crowds of spiritual beings, sometimes flitting through the air, but sometimes also inhabiting trees and rocks and waterfalls, and so lending their own personality to such

material objects—all these thoughts work in Mythology with such manifold coincidence, as to make it hard indeed to unravel their separate action."*

But the question arises—how comes it that the fox possesses this faculty of assuming at will a human shape, and of interfering with man's life and comfort? One answer to this is ready in the legend which tells how Reynard was once a very beautiful but a very lascivious woman. Her name was *Tzŭ* and on account of her many sins she was changed into a fox, and hence every female fox-fairy when asked her name answers *Ah-tzŭ*. This fact affords another expedient for ascertaining the genuineness of a doubtful female, for no real girl would ever be called by this ill-omened name. This can scarcely be called a philosophical account of the matter, but an ingenious youth, whose chief mental food is diluted Confucianism and romantic tales, has given me the following explanation. The fox being entirely a "squire of the night's body" inhales large supplies of the "sweet dews" and other subtle essences which fall to the earth between sunset and sunrise. These he refines and amalgamates all day in his den and thus obtains for his body exemption from death and corruption. But he has a great preponderance of the *Yin*, or female portion of things, and this prompts and empowers him to assume the garb of a woman. When he wants to have a literally well-balanced constitution, he becomes a "thief of the day's beauty," and gathers the *Yang*, or male element wherever he can. To a Chinese the transformation is not nearly so extraordinary a process as to us, because the former looks on man as composed of the very same materials throughout his constitution with those which form universal nature. The fox becomes immortal in human shape, and the expressions used about him are exactly similar to those used with reference to Buddhist and Taoist fanatics, who sit and ruminate all day in idle vacancy and deem themselves embryonic Genii. When the fox by means of long-continued refinement and amalgamation, has attained to the rank of an Immortal, he is supposed to possess an intimate acquaintance with the deep mysteries of nature, and these he occasionally reveals in the garb of a scholar to pure-minded students such as Chu-foo-tzŭ.

* Primitive Culture, Vol. I, p. 260.

This community of nature in man and the fox is further seen in the mode of operation adopted by the latter when about to transform himself. Thus he goes to a height and bows in reverence to the *Tei-tou,* or Ursa Major, before he attempts the feat. And the reason for his doing so is that the *Tei-tou* is the star which controls life, and its offended power might put an end to his existence at once. Then he proceeds to an old grave, scoops the earth out of it until he gets a skull, and places this carefully on his head. When he has it properly balanced and can walk without letting it fall, the rest of the process of transformation proceeds with magic speed. The tail is sometimes made to appear as a hand-maid, and sometimes it is converted into a petticoat. Rouge, powder, silks, and jewels all come at a waive of the paw, and then she practises a mincing walk and a winning smile, and a bashful demeanour, and goes to the lonely places in the country.

ARTICLE V.

BRIEF ACCOUNT OF THE FRENCH EXPEDITION OF 1866 INTO INDO-CHINA.*

By S. A. VIGUIER.

IN 1865, Mr. De Chasseloup-Laubat, Président de la Société de Géographie de Paris et Ministre de la Marine, ordered the Governor of Cochin-china to send a scientific party to explore the interior of the Indo-Chinese peninsula, as it was of the greatest importance for the future welfare of the colony that France was founding at the mouth of the Cambodje, to ascertain accurately to what countries that great stream gives access, and what populations and productions could be found in the valleys irrigated by the Meikong.

Commmander Doudart de Lagrée was appointed Chief of the exploring party, but succumbed to the fatigues and hardships of the voyage, which was continued under the direction of Lieutenant Garnier, his second in command. On his return to France, Mr. Garnier who had filled an important post in the administration of the colony, and had been one of the principal promoters of the exploration, was directed by the Government to draw up the official report of the voyage he had accomplished.

Interrupted by the war the work of Mr. Garnier is now published in two volumes, the Atlas and Album, which I have the honor to present to the Society in his name.

Allow me to analyse in a few words the most remarkable parts of a work describing for the first time the immense country situated between the shores of Cochin-china and the southern frontiers of China.

The valley of the "Meikong," under which name the "Cambodia River" is generally designated in old maps, was, until the French exploration, one of the most unknown regions of Asia. It was known that it included a large kingdom called Laos, to which the King of Holland sent an embassy in the 17th century, but Gerard van Wustoff, Chief of that mission, has left us no maps

* Read before the Society on the 2nd June, 1873.

of, or geographical documents concerning the country. The relation of his travels, published in Flemish, contains however certain details giving the highest idea of the riches and productions of its capital Vien-chan, the ruins of which were visited by the French expedition.

In this century a French traveller Mouhot, having started from Bangkok, reached the Laotian city of Luang-Prabang, situated on the Meikong, where he succumbed to the influence of malarious fever. Gutzlaff in an article published in the journal of the Royal Geographical Society having examined and made a résumé of all that was known of Laos, could only arrive at very uncertain and contradictory conclusions.

In 1837 Lieutenant, now General, McLeod of the British Army, having started from Moulmein reached Xieng-Hong, a point on the Meikong, situated in 22° N. Latitude.

This was all that was known of the interior of Indo-China when on the 5th June 1866, the French travellers started to ascend the Meikong or Cambodia river.

The expedition was composed of:—

Commander Doudart de Lagrée, Chief of the mission.

Lieut. Francis Garnier.

Lieut. Louis Delaporte.

Doctor Joubert, geologist.

Doctor Thorel, botanist.

And Mr. De Carné, diplomatic attaché.

Two interpreters for Siamese and Cambodian dialects. Four European soldiers, two European sailors, two Manilamen, and seven native soldiers from Saigon formed the escort.

Their first visit was to those magnificent ruins of Cambodje, already described by the German traveller Bastian. The publication under your notice contains the first complete work on the monuments of Angcor, a number of plans and drawings reproducing the most important edifices, and the most characteristic details of their architecture, and some of the bas-reliefs and inscriptions.

It can only be with a sentiment of admiration and astonishment, that any one contemplates these monuments, their wonderful proportions and the finish of their ornamentation, surpassing in purity and richness the most prized pieces of our antiquity.

The imaginary restoration of one of the city gates and of the singular edifice called the "Baion," found in the Album, will give you an idea of this powerful and curious architecture.

These remains of an unknown civilisation are found very far in the interior of Laos and testify that all the southern part of Indo-China was formerly under the imperial domination of the ancient Cambodians.

Mr. Garnier has devoted a chapter of his book to a historical essay on the old kingdom of Cambodje. By a careful examination of the native traditions and a comparison with the Sanscrit and Chinese documents which very often allude, the former to a kingdom *Cambodja*, the latter to a kingdom of *Chin-la* or *Kan-pu-chi*, he has arrived at this conclusion, that to the second or third century of our era must be ascribed the original foundation of the Indo-Chinese empire. Mr. Garnier identifies it with the kingdom of *Funan* of the ancient Chinese historians, the same which Mr. Wade surmised to be the present kingdom of Siam, and finally ascribes to the fifth and sixth century the most glorious time of this architecture whose beautiful productions are now concealed under the tropical vegetation of the Cambodian forests.

Instead of attributing to Buddhism, as Mr. Bastian does, this wonderful work of a by-gone age, Mr. Garnier, in accordance with the opinion already expressed on the subject by Mr. Fergusson, of the Royal Society, attempts to prove that Brahminism, and perhaps Serpent or Dragon worship preceded the introduction of Buddhism into Cambodje.

Unfortunately all the historical questions concerning this ancient empire cannot be accurately resolved until the epigraphic language of the Cambodian monuments becomes less obscure to the Indianist, for although all Cambodian inscriptions are easily made out, the latest only can be clearly understood, the old ones being written in an ancient language, which the present Cambodians themselves cannot understand; and it is to be hoped that by a profound study of the comparative philology of the present dialects, the savants will arrive at a translation of these important inscriptions.

From Cambodje the expedition marched towards the north, ascending in native canoes, the great river, the whole course of which they intended to explore.

A large zone of rapids and of thick and impenetrable forests separates the Cambodje from this mysterious Laos, which at first appeared to justify the terrible reputation of insalubrity reported by missionaries, who never succeeded in penetrating it, a reputation which had been confirmed by the death of Mouhot.

Many members of the expedition fell sick with "jungle fever," and for ten or twelve days Mr. Garnier remained in his canoe in a despaired-of condition, but the rainy season was fortunately at an end, and with the northerly winds fine weather and good health returned.

The expedition was compelled to winter at Bassac, the chief town of the Laotian kingdom of that name, a tributary of Siam, where they arrived on the 16th of September. During their stay at Bassac they had a good opportunity of studying the customs, habits and religion of the Laotian people which you will find minutely described in Mr. Garnier's book, and very artistically illustrated by Mr. Delaporte's drawings.

Bassac was the place where the Governor of Saigon had promised to forward to them a fresh supply of provisions and instruments, and above all the Chinese passports which the Legation at Pekin could not forward to Saigon before their departure.

But, as weeks passed away without bringing the expected reliefs, Mr. Garnier went back alone to meet them, and descending the river as far as Stung-Treng, on the frontiers of Cambodje, was there informed that a formidable insurrection had broken out in that kingdom and that all communication with the colony was interrupted.

The banks of the river being occupied by rebels, the boatmen refused to go any further, but as the success of the expedition was hopeless without the Chinese passports, Mr. Garnier having rejoined the expedition at Bassac on the 23rd of November proceeded with them to Oubon where they arrived on the 7th of January, 1867. Mr. Garnier devoted himself again to making a long tour overland through a perfectly unknown country, comprising the Laotian provinces of Si-Saket, Coucan, Sourèn and Tchoucan reached that part of the Great Cambodian lake belonging to the Siamese, and by boats arrived at Pnom-Peuh, the central station of the French forces in Cambodje, having, with great danger, passed through positions occupied by the Cambodian rebels.

Having found the wished-for passports at Pnom-Peuh, Mr. Garnier started to join the expedition, and going on foot by a more eastern route through the province of Sonkea, and the immense forest of Prey-saâ, reached his companions at Houten on the 10th of March.

During the stay of the expedition at Bassac, Commander de Lagrée had made a long journey to the eastward of the river, as far

as the frontiers of Anam, and surveyed the Se-kong and Se-don both tributaries of the Meikong river.

Proceeding further north, the expedition traversed a most admirable country covered with beautiful and rich vegetation, but hardly productive, on account of the exactions the Laotians have had to bear, since the Siamese conquered the kingdom of Laos in 1828.

On the 2nd of April, the travellers arrived at the ruins of Vien-Chan, situated on the left bank of the Meikong in 18° N. Lat., which had been visited by Wustoff in 1641, and on the 1st of May they reached Luang-Prabang where their countryman Mouhot had died six years before, and with the assistance of the local authorities erected over his grave a monument to his memory.

Chapter XX is devoted by Mr. Garnier to the history of Laos, compiled principally from Chinese documents, and he arrives at the conclusion that the Laotians came originally from the province of Fohkien, the population of which shows, even now, a remarkable anthropologic difference from that of the other provinces of China.

On account of the enormous difficulties of navigation in the middle of the terrific rapids formed at each of the numerous turns and windings of the river, the travellers had to abandon all hopes of reaching the frontiers of China by ascending the Meikong, and on reaching Tang-ho on the 18th of June, at the limit of the Siamese possessions, they were compelled to leave their canoes and proceed on foot.

The expedition had then arrived in a part of Laos, tributary to the Burmese empire, and as they could not before their departure from Saigon procure passports from the Court of Ava, they had to encounter all the difficulties and obstacles that the local authorities, and principally the Burman representative could raise to prevent them from proceeding any further.

The travellers had now the greatest difficulty to find bearers for their instruments and luggage, and the rainy season having set in, rendered their march very laborious and painful. They were obliged to leave behind all the botanical and geological specimens they had collected with so much trouble and care, and each one had to abandon the greater part of his clothing and carry his arms and instruments.

The journey, which until then had been comparatively easy and pleasant, became very arduous and fatiguing in the midst of all kinds of dangers.

The travellers had to cross very dense forests full of wild animals; to sleep on the damp soil; and very often to walk for days through an inundated country with water up to their waists.

The poor travellers' bare feet, torn by roots, and eaten up by leeches, could hardly support them. They all suffered from fever, and very often abandoned all hope, not only of successfully performing their mission but even of ever seeing their country again.

However, the energy of their Chief kept up their spirits; the firm attitude of Commander de Lagrée baffled the opposition of the Burman Officers, and after four months of direst miseries and struggles they at last reached, on the 29th of September, the important city of Xieng-Hong, situated in northern Laos, on the banks of the Meikong in 22° N. Latitude.

In order to remove the difficulties put in the way of the expedition by the local Burman representative, Commander de Lagrée left his companions at Muong-Yong on the 14th of August, and made a long journey overland to the westward of the Meikong valley, to Xieng-Tong, the residence of the King of that province whose father had been visited by Lieutenant McLeod in 1837, and having obtained permission to continue his march to the north, rejoined his companions at Mong-You or Xieng-Keng, on the 13th of September, having traversed the regions occupied by the independent Does tribes.

Xieng-Hong being tributary to both Burmah and China, the passports delivered to the expedition by Prince Kung appeared at first to remove all difficulties raised by the local authorities to prevent its entrance into China, but the western part of the Yunan province, at which frontier they had arrived, having been for years in rebellion against the Imperial Government of Peking, the expedition in order to avoid the rebel territories, was compelled to turn to the eastward and to rejoin the Ho-ti-kiang or Tong-King river, which springs from the Yunan mountains near Yuen-Kiang *(cheou)*, having therefore a good opportunity of visiting the important frontier markets of Se-mao, Pou-eul and Ta-lan, and of studying the mineral riches of that part of Yunan.

Mr. Garnier descended the Ho-ti-kiang about 30 miles to ascertain whether it was not a tributary of the "Meikong" but really entered the kingdom of Anam, and returned to China by Li-ngan-fu, named by Commander de Lagrée as a place of rendezvous.

In that city Mr. Garnier very nearly fell a victim to popular curiosity, and only avoided lapidation by the use of his revolver,

its rapid and successive detonations in the air, without any apparent loading, terrifying the population so much that they left him alone in the pagoda where he had taken up his abode and where they had besieged him.

Having been rejoined by his companions, they continued their journey through the region of lakes situated in the centre of the Yunan province.

All that country showed frightful signs of the most horrid civil war, roads leading through ruins were covered with the bodies of the dead and dying; whole cities had not a roof standing to shelter their miserable inhabitants, and an epidemic of cholera having spread over the country after the massacres, unburied coffins covered miles and miles of abandoned fields.

The French expedition arrived at Yunan-fu on Christmas Eve, 1867, and was received with very kind attention by the Chinese authorities.

Their mission might have then been considered at an end; they had but to join the navigable part of the Yangtze to proceed to Shanghai, but the travellers entertaining hopes of rejoining the Meikong *(Lan-tsang-kiang)* closer to its source and of being then able to trace its whole course, resolved to push on as far as the Thibetan frontier.

As they had to cross the country occupied by the Mahometan rebels, which was a very dangerous enterprise, and it being desirable to march as rapidly as possible, it was decided that a portion only of the expedition should attempt it.

At Tong-chuen where they arrived on the 16th January, 1868, the fatigues of the march, the privations of all sorts and the intense application of mind to which Commander de Lagrée had given himself during the last eighteen months overcame his energy, and he fell very seriously ill. Mr. Garnier, directed by him to accomplish the last part of their programme, left his Chief under the care of Dr. Joubert, and taking Mr. Delaporte, Mr. De Carné, Dr. Thorel and five men with him, proceeded to Mong-kou, situated in 26° 4′ N. Lat. on the right bank of the Yangtze, called there the *Kin-cha-kiang*.

The Kin-cha-kiang making a long bend of nearly 150 miles to the south between Mong-kou and Hong-pou-so, situated about 60 miles to the eastward, the expedition crossed over to the left bank at Mong-kou and travelled through very arid and steep mountains, visiting Houey-li *(cheou)* and the coal and copper mines of that part of Szechuen.

They arrived at Hong-pou-so on the 8th of February, and on the 10th visited the junction of the Kin-cha-kiang with the Ya-long-kiang coming from the north between two high walls cut in the mountain.

At Hong-pou-so the natives call the Ya-long-kiang which is the affluent, the *Kin-cha-kiang*, and the principal river or Yangtze, the *Pei-chouy-kiang*, although it is certain that the *Pei-chouy-kiang* is really the continuation of the Yangtze called the *Kin-cha-kiang* at Mong-kou.

The river runs in a gorge and is so interrupted by rapids that it is almost unnavigable. After following the left bank of the river in order to visit the Ma-chang coal mines, the expedition re-crossing the Kin-cha-kiang travelled westward through the mountains, following a direction parallel to that of the river whose course they surveyed for 300 miles further up than Ping-chan, visited by Captain Blakiston in 1861.

On the 26th of February they arrived at Tou-toui-tsi, a small village in the mountains, about 50 miles from Ta-ly, where they found a missionary, Mr. Leguilcher, who had lived in the country for twenty years.

From that place Mr. Garnier sent an express to Tu-wan-hsiu the Mahometan Chief or Sultan, informing him of his intention to visit him, and without waiting for a reply, the expedition started two hours after their courier, accompanied by Mr. Leguilcher whose knowledge of the dialects, and of Mahometan customs would be of great assistance.

The city of Ta-ly is built in a beautiful plain, situated between the western bank of the Eul-hay lake and a range of inaccessible mountains, covered with snow, which encircle the lake from north to south, leaving only at each end a narrow pass very easy to defend, which renders the place impregnable and only assailable from the lake.

This lake, situated more than 6,000 feet above the level of the sea, measures 22 miles from N. to S., and 6 or 7 miles from E. to W., the water is very deep, in some places exceeding 50 fathoms. The lake overflows at its south end through a small river which joins the Meikong on the frontier of Yunan.

The plain of Ta-ly contained formerly more than 150 villages, these, ruined by the war, are now occupied by the Mahometans.

The eastern shore of the lake is inhabited by the *Minkias* and the *Pentis*.

The *Pentis* are descended from the first Chinese families that were sent to colonize Yunan by the Mongols, after the conquests of the western province by Khoublai Kan's generals; the *Minkias* are said to have come from Nankin. Mr. Garnier's book gives a very minute description of the different human types, such as Chinese, Laotians, Thibetans, Lolos, Mautze, and other independent tribes that are found in that part of Yunan.

On the 2nd of March the expedition having received a favorable answer from the Sultan, entered the plain of Ta-ly by the Hiang-kouan pass, to the north of the lake, reached the city in the afternoon, and being quartered in a yamên near the south gate had occasion to visit the city from one end to the other.

The next day was appointed for the audience, but, instead of receiving them, the Sultan ordered them to leave the country immediately.

"Tell them," he said to Mr. Leguilcher, "that they can conquer the eighteen provinces of China but never the country I rule, that I give them life because they are foreigners, but although they have sounded my lake and measured the height of my mountains, they will never take them."

The Sultan's refusal to receive them being known to all, the soldiers and people showed signs of bad feeling towards the travellers, and it was only the European prestige—the fear of their arms, which were considered marvellous—and the energetic attitude of all, that saved their lives. The expedition left Ta-ly the next day early in the morning, going outside the city walls, and soon arrived at the fortress that defends the Hiang-kouan pass where the Commander told them that he had received instructions from the Sultan to offer them hospitality for the night, but Mr. Garnier very proudly answered, that as the Sultan would not receive him in his palace he could not now accept his hospitality in the fort, and before any thing could be done to prevent it, they marched through the pass and found themselves again with great satisfaction in the open country. After a few days rest at Tou-toui-tsi, finding it impossible, owing to the state of the country, to proceed further, they started back for Tong-chouen, where they arrived on the 4th of April, and had the affliction to learn that their Chief, Commander Doudart de Lagrée, had died on the 12th of March.

Unwilling to leave behind the body of an Officer, who had so nobly served his country and died on the battle-field of science and civilization, Mr. Garnier, with the assistance of the Chinese

authorities and surmounting the difficulties of a long voyage through the mountains, transported him to Sui-tcheou-fu where the Yangtze begins to be open to navigation.

On the 19th of May the exploring expedition, now reduced to fourteen persons, proceeded down the Yangtze; they passed in the way Mr. T. T. Cooper who was then proceeding through the province of Szechuen to join Mgr. Chauveau the Vicar Apostolic of Thibet, who failed in his attempt to reach that country and visit Ta-ly. At the same time Captain, now Major Sladen, who had started from Bamo on the Irawady was detained at Momein *(Tengyue)* on the frontier of Yunan without being allowed to proceed further.

The French expedition arrived at Shanghai on the 12th of June, 1868, having been two years on the voyage.

From Cratieh, the most distant point above Saigon surveyed by the naval hydrographers, the expedition travelled 6,225 miles, 4,200 miles of which were geographically determined for the first time.

In this long journey the geographical positions of 65 places were astronomically determined, 57 of them for the first time, accurate soundings were taken and minute surveys made of the Meikong and other rivers visited by the expedition, the different altitudes of mountains were observed and registered, together with a minute description of the country, its trade, its mineral and vegetable productions and its political organisation.

Besides these geographical results, Mr. Garnier's book contains a historical part to which I have already alluded, and a very interesting illustrated description of Buddhism as practised in the kingdom of Laos, together with geological, botanical and anthropological observations by Doctors Thorel and Joubert, and a very minute account of the working of the Yunan mines compiled from Chinese documents.

The Atlas contains twelve charts of the journey, and ten plans of *Khmers* monuments visited in Cambodje, and the Album a very fine collection of lithographs and chromolithographs representing the types and dresses of the natives, and views of the different places visited by the expedition. They have been executed by the best Parisian artists from the sketches and drawings made by Lieutenant Delaporte during the voyage.

This exploring expedition, by which Europeans have been able for the first time to enter China by an Indian route, has received the sanction of the most competent Societies.

In 1869, the Société de Géographie de Paris divided its gold medal between the two Chiefs of the expedition, Commander Doudart de Lagrée and Lieutenant Garnier; the International Geographical Congress of Anvers voted two special medals, one for Dr. Livingston and the other for Mr. Garnier, who was also presented in 1870 with what all travellers consider the most honorable recompense, the Patron's Gold Medal of the Royal Geographical Society of London.

ARTICLE VI.

A VISIT TO THE CITY OF CONFUCIUS.*

By the Rev. J. EDKINS, B.A.

ON the 16th of May, Dr. Legge and I, came on from a village inn towards Chü-fu, the city of Confucius. A thing of bad omen happened on the way. It was the sight of the first poppy field, which met our view since we left Peking, three hundred and fifty miles to the north. From this point to the old Yellow River, three hundred miles to the south, the cultivation of this plant continues at intervals the whole way. The extension of the cultivation of the poppy, even to the birth-place of Confucius seemed a sign that the teaching of that great man cannot sufficiently brace the moral energy of his countrymen to enable them hopefully to cope with this great evil.

We had crossed the P'an river, three miles south of Tai-an, and then the Wen river, fourteen miles from the same city. The broad sandy bed of the Wen, is half-a-mile wide, and is passed at a busy village, partly by bank, and partly by bridge. It flows from the eastern mountains till it meets the Grand Canal, forty miles to the west of Chü-fu.

The joltings of the carts increased in intensity as we traversed certain low lime-stone ridges in that part of the country. All travellers in North China have found in the jolting of the springless vehicles, there used, a powerful figure of speech, sure to recur to the thoughts at short intervals ever after, but in our case at one village where there are important lime-stone quarries, the jolting nearly reached the point of dislocation, both of the cart fastenings and of our skeletons. However, we did not mind it. We were busy in reflecting on the lime-stone rock on which we were walking, wondering whether it could have had anything to do with the outer colouring of the classical language of the *Lun-yü*, and of *Meng-tsï*. We were surrounded by the scenery, which impressed its images of agricultural fertility; of small rivers enriching the soil; of hills isolated in the great plain; of wheat and millet crops; of willows, poplars and acacias, upon the minds of Confucius and Mencius.

* Read before the Society on the 2nd June, 1873.

Every feature was interesting on this account. Further it was the presence of this lime-stone, as we learned afterwards, which rendered possible the beautiful marble pillars which adorn the temple of Confucius, and constitutes so rare a triumph of Chinese art.

The Sï river, a little stream nine inches deep, was of course forded with ease by our mules. After crossing it we came upon a cypress plantation, which excited eager curiosity. Dismounting we learned that it was the 洙泗書院 *Chu-sï-shu-yuen.* This has been instituted to be a memorial of the teaching of Confucius. The idea was to connect the home of the Sage with the Sï river flowing just behind the plantation. As to the Chu river, it flows through the enclosure of the tomb, half a mile distant, on the south-west. We found the place a ruin. The buildings had been erected in the Yuen dynasty, to vouch for which fact some lofty stone monuments were the witnesses. One of these was of the Yuen, and two others of the Ming, and Tsing periods.

The next object of interest was *K'ung-lin,* the "Grove of Confucius." This is the name in common use for the cemetery, in which is his tomb. The gate is on the south. It is at the back of the city wall of Chü-fu. The visitor entering the gate traverses an avenue of pines, just one *li* in length, leading in a northern direction to the tomb. The use of this evergreen in cemeteries, is to indicate the immortality of the good name of the departed. So the fidelity of the loyal subject to his prince, continuing unchanged in the time of the greatest misfortunes, is likened by Chinese poets to the pine and cypress, which are still green during the snows and frosts of winter.

At the north end of the avenue, the road winds to the west. Passing a second gate, two bridges here come in sight crossing the tiny brook called *Chu-shui.* The stream flows from east to west, but there was very little water. What water there was, seemed of a red tinge, and was much choked with vegetation and vegetable mould. It may be translated "Red brook," in accordance with the meaning of the word *Chu.*

One bridge leads to the tombs of the descendants of the Sage, including the modern hereditary Dukes, at the back of the cemetery of the Sage, a large enclosure which no foreigner has yet seen, but which as having in it the tombs of more than seventy generations of the family must be interesting. The tombs of Emperors of various dynastic lines, that have reigned in China, have become lost to view, destroyed, or neglected, while that of the "K'ung" family out-lives them all.

The other bridge, that on the west, is larger and more imposing, and conducts to the spot where lie the ashes of the Sage. Following the English usage, we speak of the ashes of the dead. But we must remember that the custom of burning the bodies of the dead is in China, Hindoo and Buddhist. The old Turanian custom of burying the body, as in the patriarchal times of the Old Testament, existed in the earliest times in China, and preceded, probably by an immense period, the usages of the religion of fire, which taught to Hindoos, Greeks, and Romans the practice of cremation.

A long row of stone ornaments, set up by various Emperors, lines the path leading to the bridge, and among them the stone usual before imperial edifices in China, warning equestrians to dismount from their horses and proceed on foot to the tomb, a necessary mark of respect. The path turning north, across the bridge brings the traveller to six stone figures. The first two are called *Pau*, "leopards." They seem to have no hair, and two horns are cut in relief at the shoulders. Why these creatures should be named *Pau*, does not appear evident. Beyond them are a pair of *Twan*, "short," said to be so called because they are short a horn. This explanation seems forced. They look like the unicorn or *Tu-kio-nieu* of Chinese writers, but the horn they should in this case have, is broken off near the root. Next to these animals are two monstrous figures called *C'heng-siang*, "chief ministers." They were named by the cemetery keepers *Weng*, and *Ch'eng*. Their height is about sixteen feet.

To understand the occasion of using these figures, it must be remembered that for some centuries Confucius was styled a *Wang*, and in the Ming dynasty he was by some styled, for a shorter time, a *Ti*.† Having these high titles, he must necessarily be attended by two chief ministers. Since the present dynasty decided to call him *Chī-sheng-sien-shï*, and not *Wang* or *Ti*, the arrangements of the cemetery have not been remodelled.

Next to these figures comes the incense-hall with its incense and candle table. This hall serves as chief gate to the tomb-inclosure, to which it opens by four folding doors behind the incense table. There, three mounds are seen. That of Tsï-sï, grandson of the Sage, is in front; next comes the grave of Pe-ü, son of the Sage;

† Not allowed however by imperial authority.

and lastly that of the Sage himself, occupying the north-west portion of the inclosure. The grave of Confucius is about twenty feet high and a hundred feet in circuit. On it grow pines, acacias, and a tree called from the shining brilliancy of its leaves *Shui-tsing-shu*,—"crystal tree."

On the tomb-stone, a lofty monument of marble twenty-five feet high, the words *Chï-sheng-sien-shï-siuen-wen-wang*,—"the most holy ancient Sage, the prince who teaches literature." On the west of the grave of the grandson, author of the *Chung-Yung*, second of the "Four Books," is a hut erected to keep in memory the noble behaviour of Tsï-kung, a disciple who at this spot for six years mourned his deceased master, and thus achieved for himself immortal fame. In front of the tomb of Tsï-sï, at about fifteen yards distance, are two colossal figures of stone, representing his attendants in the invisible world.

The inundations, caused by the swelling of the Sï river often throw down the walls of the cemetery of Confucius. This little stream, in ordinary times so peaceful, occasionally lashes itself into fury, and overflows the neighbouring fields. The removal of this trouble is looked on as the special duty of the son of the Sage, who has had conferred on him the title *Sï-shui-heu*. Each river and mountain is supposed to have its *shen*. But men, when they die, are believed to become *shen* with authority over certain tracts of country or certain powers in nature. Pe-ü being honoured with the title of the third hereditary order of nobility in connection with the Sï stream, should perform duty as such, and is sacrificed to, with the hope that he will check its excesses in time of inundation.

The city of Confucius is small, quiet, and neat. The east part, contains the *Leu-hiang* and in it the temple of Yen-hwei, the favourite disciple of the Sage. We visited this temple first. Among the pines which ornament its spacious courts are some curious twisted specimens. The chief hall containing the statue of Yen-hwei is handsome, and is supported, inside by teak pillars, and outside by pillars of marble. Two lofty marble pillars flank the great door; they are in single pieces, and are deeply carved with dragons winding round the pillar, other pillars form with these a colonnade which is continued on each side to the ends of the hall. These pillars are carved on the surface with cameo-work, as is often seen on tomb-stones, in black and white. The black is the part left by the chisel in flower, animal, or other shapes and blackened.

These stone pillars are from marble and lime-stone quarries three miles to the south of the city. The teak of the inner pillars, is from the south-western provinces, in fact from Birmah. These temples were erected in the Yuen and Ming dynasties, when Birmah had just been laid open for Chinese intercourse by the Mongol invasion, and when Yunnan had then just been reduced to the state of a province, having then become sufficiently colonized to admit of this step being taken. Perhaps it was by sea that the timber was brought.

Among the objects of interest shewn is a tree, said to have been planted by Confucius. It is now only a dry root and trunk. There is also the family well attached to the house of the Sage. The tablets are very numerous. They date from the Han dynasty. The honours showered on Confucius began at his death, when a temple was decreed to him by the ruler of Loo. From this time, a bullock was always offered to Confucius on the day of sacrifice. The assiduity of Emperors in these offerings is vouched for by the monuments, of which, from the Han dynasty downwards, the number is very great.

Visiting the Temple of Confucius at one o'clock on the 17th of May, we were first conducted to the *Hing-t'an*, a *T'ing-tsï* or square arbour, open on four sides. It is so named because Confucius gave instructions to his disciples at a spot called "Apricot altar" *Hing-t'an*. The roof of this commemorative edifice has red glazed tiles. Underneath, the structure was newly painted in red, green and gold, and was a resplendent object. The words *Hing-t'an* are inscribed on a monument in the centre.

Behind this arbour, is the great hall. The marble deep-carved pillars of the hall as seen from this point are very fine. They are ten in number; the hall, or *tien*, consisting of nine compartments. The little town of Chï-fu is fortunate in having marble quarries very near it.

The Chinese like wooden pillars. They have them in abundance. But whence the idea of stone? Probably it came from the West. At present we cannot tell certainly. It seems to be a rare peculiarity of the temples of the Shantung sages to have these pillars of stone and marble cut in one piece. There are in Peking no pillars except of wood. But some southern cities have a few examples. The marble pillars of *Sien-shï-tien*, "the hall of Confucius," are carved, to the depth of two inches, with winding dragons. The roof is of yellow glazed porcelain. The dimensions of the

hall are,—height 78 feet, length 130 feet, depth, north and south, 84 feet. The inside pillars are of teak, and are 10 feet round. They look like the well-known massive pillars of the temple of Yung-lo at the Ming tombs, but they are not so large. The north, east, and west colonnades are of pillars carved in cameo-work, like those of the temple of Yen-hwei and of Mencius. The designs are flowers and branches, which are the round surface of the pillar left by the carver, who cuts out the intervals to a very slight depth. This style of pillar is known in Chinese as *Chwen-hwa-shĭ-chu*. The ceiling consists of 384 panels. They are square, gilt, and ornamented with dragons. Such panelled ceilings are familiar to the visitor of Peking in many houses and temples.

The image of Confucius reminded us of the influence of Buddhism in China. It is acknowledged by well informed Chinese authors that the practice of placing images in Confucian temples originated in the Hindoo idolatry.

Not only is there a statue of Confucius in the temple at his old home, but his likeness is engraved on several monuments. One picture represents him sitting, another in his chariot, another standing, another walking. The scenes of his life are also carved in marble in imitation of the Buddhist fashion of representing pictorially the scenes of Buddha's life.

Of the descendants of the Sage there are supposed to be from twenty to thirty thousand. They reside not only in Chü-fu, but in many other cities. They occupy various positions in life. They plough the ground and reap the harvest. They push and pull at the wheel-barrow. They open shops and engage in trade. They also study books and rise to good positions in the service of the state.

To transport us from Confucius's birth-place to Wang-kia-ying, we had an escort of six, of whom two were of the posterity of the Sage; an old man and a young man. The old man was fifty-five and too far decayed for the hard work of pulling a wheel-barrow, which is intended to carry three hundred pounds. He did it to earn money being unwilling to enter sooner than absolutely necessary the class of the superannuated. He kept the whole party back, and whenever there was a steep incline to ascend, or a piece of sandy road through which to wheel, his associates had a quiet laugh at his expense. They were much amused at his puffing, and his laborious efforts to do his share. He never seemed to be conscious that any one was laughing at him, and thankfully

received a special donation made to him at the end of the journey on the ground that his ancestor was the Sage. The younger man shewed more anxiety to possess our books than any one else of our party, but it was probably more from unintelligent curiosity than from his inheriting any literary tendencies.

A descendant of Confucius, whom I met in Peking, was well instructed, intelligent and obliging. He gave me a letter to his brother, who, under the Duke at Chü-fu, occupies a post of considerable influence. The brother was also extremely amiable, and did his best to please us when visiting the temple of Confucius.

About half the population of the city belongs to the Confucius family. In the eastern portion the descendants of Yen-hwei, the Sage's favorite disciple, have a corner called the "*leu-hiang*" to keep in remembrance a passage in the Lun-yü. The Sage praised him because he took his food cheerfully from a bamboo cup, drank water from a gourd (calabash), and was satisfied with a humble neighbourhood to live in. The two words "humble neighbourhood" are inscribed on the arch-way, which crosses the street at the spot, of which tradition has kept up the memory.

The Duke, whose title is *yen-sheng-kung*, lives on the east side of the temple of Confucius, of which he is chief warden *ex officio*. We were told that he has 3,600 *king* of land, an imperial gift coming down from the Yuen and Ming dynasties, which gave him his present title. This statement makes him owner of 360,000 *meu* or 60,000 acres. Dr. Williamson was informed that the land was nearly three times greater. Our authorities were our wheelbarrow drivers, who were quite agreed on the number. The land is distributed in several prefectures of Shantung.

He directed an officer of the third rank (our friend above-mentioned) and one of the fourth (of the rank *Pe-hu*, who has the cemetery in charge) to conduct us through the temple and also to the tomb. As we had already seen the cemetery, we said so, and stated that we would be in readiness, at the hour named 11 A.M., for seeing the temple. We waited for the messenger to conduct us, but as he did not appear till one o'clock we were late. We were received by the two officials named above, and with every attention conducted round the temple. As we were approaching the Han monuments a messenger came to say that the Duke had business, and could not see us. This was a disappointment, because we had delayed a day to see him, and we were informed that preparations had been made the day before for our reception. Our

cards had also been sent in, when some caprice caused the Duke to change his mind, or it may be that some important business required his immediate attention.

The officers, who help to keep up the dignity of the Duke, are supported by the estate. The Duke augments the large receipts from his estates, which at a tael per *meu* should amount to *Taels* 340,000, or £120,000 by trading. At Tsing-kiang-p'u we saw lying in the canal large boats such as make long voyages, with a flag inscribed, "This boat belongs to the hereditary *yen-sheng-kung*." On inquiring we found that he has seven or eight of these large boats, which convey to Tsi-ning bamboos, rice, wood and other things to sell there for profit.

We did not hear of any charity school for poor children of the K'ung clan. No efforts seem to be made for conveying instruction to those of the clan, who are too poor to obtain it for themselves. As he is supposed to be immensely rich and must be so if the figures are reliable, such a use of part of the ducal revenue would be in keeping with the position occupied by him. He is honoured simply as the representative of the Sage. The nation, or the Emperor acting for the nation, desires to honour the Sage and in him literature and education, part of the money therefore should be used for the spread of knowledge and useful learning. The establishment of a University or a system of education for the poor would be perhaps a more suitable way of honouring the Sage than heaping wealth on a small portion of the K'ung clan.

We could hear of none of the K'ung family becoming Buddhist priests with shorn crown and Indian robe. But it is not unlikely that there are many such, for it is usually poverty or sickness that lead to the assumption of the Buddhist vows, and the family of Confucius are as liable to these as others. Many of them are very poor.

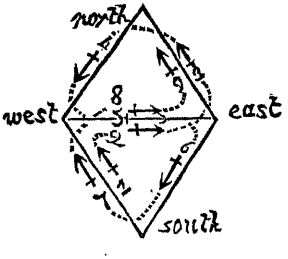
The K'ung family reside in many other cities and not in Chü-fu only. When the southern Sung was established at Hangcheu, the representative of Confucius of that day followed the fallen fortunes of the Sung imperial family to Hangcheu, and was placed at K'ü-cheu-fu a city of Chekiang province to the south of Hangcheu. Here his descendants remained till the Mongol conquest. The Kin Emperors appointed another Duke K'ung, who remained at Chü-fu during that dynasty. Afterwards the Mongol Emperors put an end to the system of two rival Dukes. Some, however, of the representatives of the K'ung family were left at K'ü-cheu and still remain there.

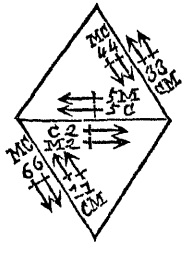
The first duty of the chief descendants of the Sage is the observance of the sacrifices offered monthly and annually in the temple erected for this purpose.

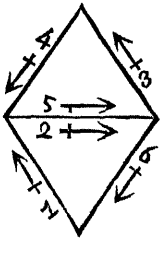
In regard to the sacrifices, the arrangement is very elaborate. The musicians are placed, some of them inside of the sacrificial hall, and some outside the doors on "the moon terrace" as the broad elevated pavement before the hall is termed. The singers and harpers are near, while the drums and fifes are distant. Within the great hall doors, and facing the tablet which is in the centre of the hall, on the north side, are two groups of harpers of four each, three with the small harp and one with the large. Two groups of three singers each stand at the east and west of the hall facing each other. The choir leaders conduct the music with the help of a sort of soft drum and are four in number, two facing east and two facing west, somewhat in advance of the singers. A little to the north of the drummers, who lead the music, are two dragon-embroidered flags called *Hwei*. When the music should commence the banner-man raises the banner. As the dragon ascends the music begins. So when the banner descends, the music ceases.

Outside of the great doors are arranged six pipers, eight flutes, a drum, a bell and a musical stone. The band consists in all of forty-seven performers. The three lofty doors, supported on each side by the still higher pillars of marble, deeply engraved with dragons, are all open. The band occupies the east and west sides. In the centre of the great hall are the sacrifices. A space of great width is left in front of the offerings for the chief sacrificer and his suite to pass to the spots where they make the prostrations.

Below the "moon terrace" on each side of the great court called *T'ing* is a band of twenty-four dancers with a leader to each amounting to fifty in all. These fifty dancers perform their dances in the court between them. They go from point to point passing through a sort of gigantic figure—eight, or rather two enormous equilateral triangles placed base to base.







The first of the above diagrams represents the dancers as beginning their procession at the south point of the dancing pavement. They go through nine movements proceeding in the direction of the arrows in the diagram and ending at the north point. If we mark the middle points of the four sides of the quadrangular pavement as north, south, east and west, their successive positions will be S., W., E., N., W., E., S. W., E., N.

The second diagram represents the dancers, who have the civil costume as commencing at the south point of the pavement and proceeding to the west, east, north, east, west, and south points in succession. They then give place to the performers in military costume who go through the same figure.

The third diagram represents the troop of dancers beginning as usual at the south and passing in succession through the west, east, north, east, and west points to the south again.

The costumes are all antique. Instead of the present small sleeves and comparatively tight robe, the dancers wear the deep sleeves and loose robe of ancient times. The sleeves hang to a depth of about twenty inches from the arm. The hat is square and rises at the back. Branches are carried in the hands, and also a bâton. Both are used in attitudinizing. The attitudes are according to rule, very various and absurd, and are taught with diagrams.

The dances are slow and stately like the minuet dance of Europe.

I have been thus minute in the description of this feature in the worship of Confucius, because it is a genuine relic of ancient life, and as such is adapted to cast light on the old world. The music and dancing of ancient nations were connected with their religion and have therefore a special interest attaching to them. They help us to understand the ceremonial of Babylon, Nineveh, Shushan the palace, and Memphis. So far as the Jews imitated the customs of the surrounding nations, these details may also illustrate the Old Testament.

Further, the use of the large hall, terrace, and court of the Confucian and other temples cannot be well comprehended unless they be seen on the day of sacrifice, when attention is given to the regulations, and when the number of persons required by the ritual is complete. At least the presence of a large number of performers on festive days should be taken into consideration in accounting for the use of the ample spaces withing and in front of the temple.

The songs of the sacrifices differ according to circumstances.

The spirit has to be met and escorted to that spot in the temple where the offerings are presented.

There are three offerings, representing three intervals in the feast at which the spirit is entertained. An ode is prepared for each time of offering.

There is also an ode for the time of removing the viands, and another for escorting back the spirit.

The recognized principle of Chinese religious worship is that every thing be said and done as if the spirit were present, *ju-shen-tsai*, as the phrase is. In addition to this rule it has also to be kept in remembrance that on a solemn occasion, occurring once or twice a year, with careful preparation and diligence in performing all prescribed acts, it may be that the spirit of the Sage is by the worshippers really believed to be there. In ancient times there would be more of this feeling and conviction than now.

When the music is played and the ode sung at the meeting of the spirit the words prescribed are—

Great is Confucius—the Sage.
His virtue and teaching are exalted.
The people reverence him, having felt the renovating effect of his exhortations.
The sacrifices are constantly offered;
They are pure and without defect;
They are plentifully provided.
The spirit comes.
There is light beaming from the sacred countenance of the Sage.

At the presentation of the fruits of the earth in bowls and platters, with rolls of silk cloth and jade ornaments, the words prescribed to be sung are—

From the beginning of the human race,
Who can fully imagine his abundance of goodness and wisdom?
He only can be called the divine and enlightened teacher, passing all former sages in excellence.
The offerings of grain and of silk are complete and suitable,
While there is no lack of the fruits of the earth.
The spirit of the Sage listens.

When mention is made of the sacrificial animals, which are stripped of their skins, cleansed, and placed on wooden stands, the ode prescribed says,—

Great is the wise teacher, who truly from heaven has derived his virtue.
We perform music in honour of him.
We present sacrifices without cessation.
Our wine is fragrant,
Our animal offerings are of the best.
While we offer them to the spirits, surely it may be said that the spirits manifestly appear.

At the third time of offering, special mention is made of wine offered in a gold cup. The ode says,—

Honoured teacher of a hundred kings,
Ruler of living beings and things,
See how vast and various are his activities, how marvellous his repose!
And pour out the pure and well tasted wine from the golden cup.
This is our third presentation,
Thus we complete the ceremonies as they are appointed.

When the viands are removed at the close of the feast, the ode appointed to be sung contains the following sentiments.

The sacrificial animals are here with the baskets and bowls, in orderly arrangement.
They are fragrant; they are pure.
The offerings and the music being complete, men are in harmony and the spirits rejoice.
We receive blessing through sacrificing and obey the rules without fault.

The sixth and last section of the sacrificial odes is sung on the return of the spirit. When the feast is terminated, it is believed that the spirit retires to the spot, where the tablet is preserved.

The words prescribed to be sung are the following.

To the grand old hall of learning,
Scholars from the four quarters of the horizon,
Come to show respect.
Reverentially they perform the ceremonies of the sacrifice,
With all the solemn show required by the ritual.
The spirit having enjoyed the fragrant odours of the gifts
Returns to its place.
The presentation of the offerings is finished.
All who have shared in the ceremony enjoy great variety of happiness.

Among the directions to the singers it is particularly enjoined that their singing be shrill, slow and not too loud. Chinese musicians love shrill sounds.

While these odes are sung by the musicians in antique costumes, the worshippers, consisting of the Duke and other members of the K'ung family, are all habited in the modern style. They wear a pointed cap with ball surmounting it, tight sleeves to their gowns, and a loose fitting coat buttoned down the middle. The contrast must be striking to a stranger.

On one occasion Confucius asked several of his scholars what they would do if their merits came to be recognized by princes of states. Among them was Tseng-si Tien. Confucius addressing him by his name in the old affectionate manner, said "Tien, and what would you do?" The disciple ceasing to play his harpsichord, rose up and said, "Different is my opinion from that of those who have already spoken." "What matter?" said Confucius "let every one speak his own mind." "In the last month of spring," said he, "donning my spring clothing all complete, with five or six companions who wear the adult's hat, and six or seven boys, I would going with them, wash in the 沂 Ye river, enjoy the breeze near the rain altar 舞雲壇 and return home singing."

It is pleasant to know that the Sage approved this answer. The enjoyment of spring weather, the feeling of ease and cheerfulness, the mixing of happiness with work were thought well of by Confucius. A man should be joyful in spirit, when he perceives the mellowness of the spring air and the greenness of the earth's covering at that season of the year. There was harmony between the disciple and the teacher in this thought. Away with ambition,

away with discontent, and let your soul be at one with nature. To the mind of Confucius this was a rational enthusiasm. To the common mind, the class to which Tsï-lu and several of the disciples here mentioned belonged, it was *kwang* "madness."

We were leaving the city of Confucius on the south side, when the "Rain altar" was pointed out to us, on the left hand of the road. It consisted of a small raised terrace not a quarter of a mile from the highway. On the road side an upright stone monument bore the inscription *Wu-yü-t'an*, "Rain altar." Here the magistrate of the city in time of drought offers sacrifices for rain. Between the suburbs and this altar is a brook, which still bears the name *Ye-shui*.

Here it was then that many of the celebrated scenes of the Lun-yü took place 2400 years ago. Chu-hi says it was south of the city of Lu.

The present city of Chü-fu is built so as to enclose the site of the house of Confucius within its walls. Tradition says the city of Lu or Lu-c'heng was near the grave of Shau Han a mile and a half east of the present city. The device of the present site for the city evidently rested on a desire to embrace within it the house and haunts of the Sage, and the temple where he is worshipped. This is requisite for their better security, especially as the inheritor of the family honours and all the collateral descendants reside there.

ARTICLE VII.

SHORT NOTES ON CHINESE INSTRUMENTS OF MUSIC.*

By N. B. DENNYS.

AMONGST no people is the theory of music more highly honoured than by the Chinese, and by none are western notions of the science more hopelessly outraged in practice. Assuming, as it does, a very prominent place in the Chinese curriculum, a department in the Board of Rites is charged with the sole duty of studying "the principles of harmony and melody, composing musical pieces and forming instruments proper to play them." The care thus evinced for the cultivation of the art, the fact that music was regarded by Confucius, not as a mere pleasant pastime, but as an essential auxiliary to good government, and the further fact that it is, to the present day, deemed a befitting and necessary accomplishment of the (so called) educated classes of the most populous nation in the world, give a political and social interest to details which viewed from the stand-point of art, are by the western musician regarded only with pitying wonder. So much indeed has been written upon the subject of Chinese music that some apology may seem necessary for any fresh attempt in the same direction. My object in the following paper will be to present a concise description of native musical instruments, with such details of their origin and manufacture as I have been able to obtain. The admirable monograph of Father Amiot in the sixth volume of the *Mémoires sur la Chine* contains indeed so large an amount of information on the subject, that, were it not written in French, and sufficiently rare to be seldom found on the book-shelves of ordinary readers, I should scarcely feel justified in going over so much old ground merely for the sake of including a few additions. As regards the interesting but scarcely exhaustive details of the same subject to be found in the works of Williams, Bridgman, and others, their necessarily brief nature and the total absence of illustrations, still leave something to be desired. I need, however, hardly say that in the following notes I am under very considerable obligations to previous writers on the subject.

* Read before the Society on October 21st, 1873.

As amongst most other nations, has been the case with the means of producing sounds of differing pitch and with varied rapidity so as to produce what we call *tune* has from early times exercised the inventive powers of the Chinese. Their intention and its execution, however, present to western ears one of the most singular anomalies in the musical history of any existing nation. Elevated to the dignity of a national science, music has in China been studied with an ardour that throws into the shade the efforts of united Europe, while the means of expressing it have ever remained at a point but little superior to those employed by the most uncivilized of African races. As most happily expressing the range of Chinese effort (distinguished from its results) I may here quote a few sentences from the pen of Father Amiot.* "If," says that painstaking and accomplished writer, "the Chinese have sought the quadrature of the circle; if they have laboured to discover methods for the duplication of the cube, the Greeks have done likewise. But that which the philosophers of Greece probably did to employ an unfilled leisure, or to satisfy a sterile curiosity, has been done by the philosophers of China in view of its utility for the perfection of that one amongst their sciences, which they regarded as the key to all others. If they have sought the quadrature of the circle, it was to ascertain the exact proportion of the diameter to the circumference, in order to determine with precision the area of each *Lu*.† If they have laboured at the duplication of the cube, it is to be able to exactly measure the solidity of any given *Lu*, to design a second solid precisely similar to the first, and to thus arrive at a sure knowledge of the accuracy of the tone." It is not my intention in this unpretending paper to enter upon the wide, and I cannot help saying, unsatisfactory, subject of the theory of Chinese music; and this not merely because Amiot has most exhaustively treated it in the work already quoted from, but because a series of papers in English on the same topic from another and more competent hand are in course of publication.‡ I shall therefore, before proceeding to a brief account of the musical instruments which are or have been in use amongst the Chinese, simply content myself with a passing reference to the legendary origin of the mechanical

* *Mémoires concernant les Chinois*, Tome VI, p. 147 et seq.

† The *Lu* is a demi-tone, of which twelve go to the Chinese octave. The word is here used to signify the tubes producing the note.

‡ Rev. E. Faber in the *China Review*.

production of tone, and in this again I avail myself of the labours of the learned French missionary. Slight as the legends are, they possess some interest in view of their apparent connection with similar traditions in the West.

The earliest mechanical effort to produce sounds was, according to Chinese records, made under the orders of Hwang-ti (about B.C. 2637), and the first substance employed was mother-earth. A fine clay or porcelain was kneaded, and reduced to a semi-liquid state, so as to bear pouring into a mould. To produce this, the halves of two eggs, those of a fowl, and of a goose respectively were placed one within the other, the vacant space between the two shells forming the mould. This having been filled with the clay was placed in a furnace where it remained until thoroughly baked. A hole was, previous to this, made in the apex to serve as an embouchure, and five others, three of which were arranged on one side in a triangular position and two horizontally on the other side, were bored as finger-holes. By stopping them different sounds were produced. It does not, however, appear to be certain whether these, with the normal tone, produced an octave. Nor indeed does it much matter, as very few years elapsed before the discovery was made, which in other countries formed the basis of instrumental perfection. Acting under the orders of Hwang-ti one Ling-lun was directed to "regulate" music, and accordingly proceeded to north-western China where was situated a mountain abounding with a bamboo of peculiar elegance and straightness. Taking various lengths of the portions between each knot, he blew into each until he hit upon one, which gave the normal sound of his own voice when speaking unaffected by any sort of emotion—say, like the manner of intoning prayers. Some omission occurs in the account, as no mention is made of any stops at the ends of the tubes thus experimented with. Ling-lun, however, cut down a goodly number of different lengths, and exhibited them before the sovereign and his court.* He had already made the discovery that the interval of the octave could be divided by rule into twelve demi-tones (I retain Amiot's word to distinguish them from *semi-tones*) so taking a dozen tubes, and placing them side by side, Ling-lun produced the first pan pipe. Figure 28 shews the twelve *Lu*, and figure 41 the ordinary pan pipe.

* *Mémoires concernant les Chinois*, Tome VI, p. 87.

The desire, ever evinced by the Chinese to refer all discoveries to natural models, is amusingly exemplified as regards music. Thus the fountain source of the Hwang-ho, or Yellow River, was supposed, as it issued in a boiling jet from the earth, to give a sound of precisely the same pitch as the normal open tube. More quaint and amusing still are the fabled characteristics of the voice of the *Fung-hwang*, or phœnix, and its mate. As Ling-lun was discovering the wondrous tune of the source of the Hwang-ho, a *Fung-hwang*, accompanied by a female bird, suddenly perched upon a neighbouring tree. Each bird uttered six notes of different pitch, the first uttered by the male exactly agreeing with that made by the fountain, and hence with the note yielded by the "open tube." This is described as a piece of "unhoped-for good fortune," and, following out the hint, Ling-lun cut twelve bamboos forming an octave, of which the first, third, fifth, etc., agreed with the notes uttered by the male, and the even numbers, second, fourth, etc., with those uttered by the female. Delighted with his discovery he returned to the Emperor, who conferred upon him high honours.

The traditionary and puerile fables of the discovery of musical tone must not, however, detain me from the purpose in view, that of describing, not the theories, but the practical outcome of Chinese invention in this regard. I must first, however, briefly allude to the classes into which musical instruments in China have from time immemorial been divided. Eight sorts of sound are, according to native writers, producible from natural objects, viz:—those derivable from Skin, Stone, Metal, Porcelain, Silk, Wood, Bamboo and Gourds. The mystic connection of this number *eight* with the *Pa-kua*, each *kua* composed of *three* marks, represented in the musical arcana by the natural divisions of animal, vegetable, and mineral, will be found treated of at length in Amiot's work. For practical purposes it is sufficient to note the divisions in question which for convenience I set out in tabular form.

1. Commencing with Skin, which includes the tanned hide of both animals and reptiles, we find this division to include the various forms of drum, of which eight leading varieties are noted in classical works, viz:—

1. The *Tsou-ku* or *Pen-ku*.
2. The *Kau-ku* or *Yin-ku*.
3. The *Hiuen-ku*.
4. The *Cho-ying* 助應鼓 and *Urh-pi* (small drums attached right and left to the preceding).

5. The *Chin-ku* 戰鼓, also known as *Lei-ku*, *Ling-ku* 靈鼓, *Lou-ku*, and *Chun-ku* 晉鼓.
6. The *Tao-ku* 鼗鼓.
7. The *Ya-ku* 腰鼓.
8. The *Po-sou*.

Additions and improvements have expanded the original number of eight varieties into eighteen. I forbear in this place any descriptions of the instruments as they will be found in the list below.

2. Stone has in China, as elsewhere, been discovered to possess the power of yielding musical sounds. The rock harmonicon of modern Europe was, in fact, anticipated ages ago by the Chinese, who used pieces of stone cut into a certain shape to form the notes of the octave. The sounds produced by these are described in native works as "between these evolved from metal and wood." Although not strictly included in the list of musical instruments it may be noted that cups of various dimensions have been used by the Chinese to produce the tones of the octave, not unlike our musical glasses, as have also what they denominate pieces of "sonorous glass." It is probable that the existence in various parts of the country of sound-yielding rocks—such for instance as the "Ringing Rocks" near Macao—first suggested the idea of utilizing stone for musical purposes. The instruments mentioned in Chinese records are:—

1. The *Yu-king* 玉磬, or jade rack, containing sixteen pieces of jade, slung in order, according to tone.
2. The *Tso-king*, a single piece of sonorous stone.
3. The *Ping-king*, of which the *Yu-king* was a variety, and including the *Ching-king* and *Sung-king*, which apparently differed only in the dimensions of the sounding stones.

3. Metals though naturally giving material for a greater variety of instruments than most other substances have been utilized to a singularly small extent by the Chinese. Gongs, cymbals, and bells are alone mentioned under this head in the classical books, nor has modern invention supplied many additions, two or three new instruments of poor construction alone figuring in the general list. Those referred to in Chinese annals are:—

Bells.—1. *Po-chung*, or *Yung-chung* 鏞鐘, large heavy bells used by themselves.
2. *Tē-chung*, or *Piao*, smaller bells also used singly.
3. *Pien-chung*, the smallest of all, used to make sets composing one or more octaves.

The metal, of which these were formed, consisted of an alloy formed of six parts of copper to one of tin. Their shape was, as will be seen by the illustrations, nearly square and somewhat peculiar. It would appear that at some time between the date of the earliest construction of bell racks and that of the eastern Han dynasty the use of the semi-tones fell into disuse, so that in a set of twelve bells five were, by the musicians of the day, unused—a practice reformed about A.D. 60 by one Pao-ye, then President of the Board of Rites.

Of gongs and cymbals but slight mention is made by the old writers; they seem to have been, if not absolutely, unknown, but seldom used.

4. The only Porcelain instrument, of which any record exists, is the *Hiuen* before referred to as formed in a mould composed of two egg-shells of differing size.

5. Silk answers in the instruments of the Chinese to our wire and catgut, the former of which (of comparatively modern use) alone finds place as a sound yielding medium. Under this head are included stringed instruments, only two varieties of which were formerly in use. These were the—

1. The *Chin*, originally of five and subsequently of seven cords.
2. The *Ch'e*, a larger variety of the same instrument originally possessing fifty strings, which were subsequently reduced to twenty-five.

Wonderfully fanciful were the details of their construction. The ancient "Chin" was made of *Tung* wood, rounded on the upper surface to represent the heavens, and flat beneath to represent the earth. Eight inches from the end (there being *eight* winds) was the "abode of the dragon,"—and so on, each portion of the instrument receiving some similar designation. Full particulars, however, will be found in the descriptive list, so I need not here pause to give them. The elementary form of stringed instruments said to have been invented by Fu-hi, was in China, as elsewhere, a simple board of dry, light wood, upon which were stretched hand twisted silken cords. By and by they began to mould the board; it was made convex and was constructed of certain dimensions and with greater skill, and the number of strings became fixed, until the *Chin* and *Ch'e* were at length developed. We do not find in classical writings any mention of stringed instruments more nearly resembling the guitar or violin.

6. Under the head of Wood are included certain ancient instruments, which yielded a noise when struck; arrangements somewhat resembling castanets; and Wind instruments. Their names were as follows:—

Percussive.—The *Chou*, or bushel measure, which when shaken was struck by a sort of hammer attached to its bottom.

The *Ou*, a carved instrument resembling a tiger lying down. The backbone being furnished with projections, along which a stick was passed to produce a rattling noise.

The *Chung-tu*, a number of slabs of wood strung on a cord, and having engraved upon them portions of the classics. They produced a sort of castanet sound when struck together upon the palm of the hand, being used to beat time.

Wind instruments made of Bamboo, viz:—

Kwan-ku, a series of twelve pipes arranged like our pan pipe, and resembling it in look.

Yo, or flutes blown into from the end like the pan pipe, and having three or six holes, there being three varieties.

Ti 笛, flutes with a pierced stopper at the upper end, also with three or six holes.

Chĕ, flutes closed at both ends with the embouchure in the centre and three finger holes on either side.

7. The Gourd, or Calabash, was utilized for musical purposes by inserting in it a number of pipes of different lengths, with holes near the points of insertion which, when stopped by the finger, caused them to sound. A full description of the instruments thus formed will be found below.

Having thus condensed from Amiot's monograph a brief sketch of what may be termed the classic instruments of the Chinese, I will now endeavour to give a fuller account of the instruments chiefly known to or used by the modern Chinese. I am painfully aware that the list is still imperfect, though it will, I trust, be found considerably more comprehensive than that given by either Amiot or Bridgman. I have taken Amiot's drawings almost entire, as readers of the "*Mémoires*" will observe, adding to them some twenty or more new sketches, for the imperfect execution of which a Chinese engraver is greatly responsible. As a matter of convenience I divide it as follows:—

1. Instruments of percussion, including—

(a) Those in which a membrane is the vibrating medium.

(*b*) Those constructed of wood only.
(*c*) Those constructed of stone.
(*d*) Those constructed of metal only, singly or supported in frame.
(*e*) Those constructed of glass or porcelain.

2. Wind instruments.
3. Stringed instruments.

1. Instruments of Percussion.

(*a*) *Those in which a membrane is the vibrating medium.*

1.—The *Tu-ku* 土鼓, or "Earthen Drum." Of the earliest form of this description of instrument no authentic description appears to exist. Earthenware being naturally liable to accident, its common use for the purpose in question was soon abandoned, though occasional specimens are said to have existed in comparatively modern times. Its name is always given in the list of "the eight musical instruments" to which Chinese refer enquirers. It appears to have been used at the sacrifices offered in the Imperial and Confucian temples, and is said to have resembled a scale-weight in form, with one head.

2.—*Tsu-ku*, or *Pên-ku* 盤鼓 (Amiot), mentioned in the Shih-king, was a barrel-shaped drum fixed upon an upright with a cross-shaped foot. The upright passed completely through the barrel, which was about three feet long and six feet six inches in its greatest diameter, the ends covered with skin measuring about four feet across. It is supposed to date back to about 2205 B.C., being in use at the time of the Great Yü. The *Tsu-ku* appears to be almost identical with the modern *Ying-ku* 應鼓, or pillar drum.—All double-faced drums are called *Ying-ku*, but the drum best known under that name is the instrument to be seen in most temples, standing on a pillar which raises it some six or eight feet from the ground. It is beaten to summon worshippers and to arouse the attention of the gods. See FIG. 1.

3.—The *Ching-ku* 鼗鼓, also known, when unornamented, as the *Chien-ku*, and by the names of *Lei-ku*, *Ling-ku* and *Lo-ku*, according to the style of ornamentation, resembles the *Ying-ku* in form, but is somewhat larger in diameter. (*Mémoires*, Tome VI, p. 221). See FIG. 2.

4.—The *Chang-ku* 長鼓, larger in the barrel than the foregoing, and of less proportionate diameter. The supporting pillar is in this case driven into the ground, so that its locality, when once erected, is fixed. See FIG. 3.

5.—The *Ling-ku* 靈鼓, anciently known as the *Tao-ku* 鼗鼓, described by Bridgman as the "tambourine and rattle drum," consists of a small drum about a foot in length and the same in diameter, and has a handle affixed to it passing through the barrel whereby it is turned. Two balls or rings, suspended by strings from the barrel, strike the heads, when the instrument is twirled. The heads are made of chamois skin. A smaller kind than that above described is some six or seven inches in diameter and length, and is used by hawkers of millinery goods. A tin imitation of the latter is a common toy with native children. Some of the *Ling-ku* consist of several drums attached to a central frame, and struck only on one head by the balls. The hand tambourine, also vulgarly known as the *Ling-ku*, resembles the western instrument of the same name having, however, a handle. Singers hold it in the left hand and strike it with the right.

According to Chinese authorities a distinction existed between the *Ling-ku* and *Tao-ku*. Both date from the time of the Chow dynasty, the *Ling* being a six faced instrument, and chiefly used in sacrifices to the 社 or tutelary (stone) gods of hamlets, while the *Tao* was more especially used in sacrifices at Ancestral temples, and in the Imperial orchestra where the Emperor conferred titles of nobility upon his subjects. See FIG. 4.

6.—The "Concert Drum," *Pang-ku* 梆鼓, or "auxiliary drum," a small flattish drum, the body made of wood, the top covered with skin and the bottom hollow. It is used by the leader of the band to mark time, and is one of the chief instruments in a theatrical orchestra. The diameter of the head is a little over six inches. See FIG. 12.

7.—The "Base Drum," *Fan-ku* 鼙鼓, a large drum usually supported on a stand, in shape like a flattened orange. This instrument is a prominent object in all religious and other processions, and its deep boom can be heard at some distance. The barrel is usually ornamented with paintings. When carried in procession, it is placed in a small roofed frame borne by two or more coolies, a third attendant wielding the drum stick. See FIG. 7.

8.—The *Hsün-ku*, an instrument resembling the *Ying-ku* shewn in figure 1, but larger in the barrel, and having attached to it on

either side two small drums as shewn in the engraving, see FIG. 8. These were called respectively the *Chuo-pi* and *Ying-pi*, the former being the larger and resembling a cavalry drum. This was struck lightly, while the *Ying-pi* was beaten more strongly. It is somewhat difficult to arrive at the exact difference between the *Hsün-ku*, and other drums closely resembling it.

9.—The "Loaf-shaped Drum," *Man-tou-ku* 饅頭鼓, so called from a rude resemblance to the Chinese loaf. This is made of wood, its upper face being covered with skin; the bottom small and the belly hooped. Its diameter is about a foot; the height is some sixteen inches, and it gives a deep base sound. This instrument is used chiefly in the southern provinces at theatricals, processions, etc., and is seldom met with in North-China. The upper end is covered with buffalo skin, the other end being left uncovered. See FIG. 10.

10.—The "Soochow Drum," *Su-ku* 蘇鼓, is a thin instrument entirely covered with skin, and beaten on one side only, those made at Soo-chow being considered the best. It is used in theatricals and at fêtes in conjunction with other instruments. It is made of various sizes, the smallest being the most common.

11.—The *Chin-ku* 戰鼓, or "War Drum," has a wooden barrel, somewhat flat in the body, both ends being covered with skin. As its name denotes, it is essentially a military instrument, the drum being invariably used to sound an advance, while the gong gives the signal for retreat. The *Chin-ku* is four (Chinese) inches in depth and thirteen inches in diameter. Originally used by soldiers only, it is now to be heard in funeral processions and festivals, and in the hand of watchmen announcing the watches of the night. It is like most Chinese drums, seldom provided with braces to tighten the heads, but is sometimes so fitted.

12.—The *Ying-ku* 應鼓, or "Echoing Drum," was an ancient instrument used in the Chow 周 dynasty, and is described as long and slender, bulging a little in the middle resembling a Chu 柷 in appearance, and six feet five inches (Chinese) in length. The modern instrument, known by the same name and spoken of as the leading drum, is hemispherical, small, and almost solid with skin stretched tightly over its whole upper surface.

13.—The *Tsung-ku* 晉鼓 was a now obsolete drum used in the time of the Chow, and stated to have been six feet six inches in length. A drum of this designation, but obviously of far less cumbrous size, was, and still is, used by cavalry, the instrument

being affixed to the saddle, and placed in charge of the subaltern of the company.

14.—The *Chi-ku* 鼜鼓 was also an obsolete military drum referred, like so many other instruments, to the time of the Chow dynasty. Its chief recorded use was to give the alarm at night, it being occasionally beaten so as to turn out the troops, and so keep them on the alert. But meagre details of this and many other instruments, however, are to be found in Chinese works.

15.—The *Lo-ku* 路鼓, or "Double Drum." An ancient instrument with four faces, said to have been used in conjurations during the time of the Chow dynasty.

16.—The *Ko* 鼛, also an obsolete instrument, the largest sort of drum used in old times. Chinese records speak of the *Ko* being from twelve to fourteen feet in length of barrel.

17.—The *Ya-ku* or *Yau-ku* 腰鼓, the "Waist Drum" so called from being suspended at the waist by a cord passing round the neck; both a modern and an ancient instrument. It was introduced into the southern provinces by travelling beggars and singers. Its usual size is about twelve inches in length by four in diameter at the heads. The barrel is generally, but not always, ornamented with drawing of flowers, etc. See FIG. 16.

18.—*To-po-su*, a small drum one foot four inches in length by seven inches or less in diameter, straight in the barrel, and usually resting on a wooden table a foot high and a foot wide. See FIG. 17.

19.—The *Wai-ku* 懷鼓, "Bosom Drum, or Flat Drum," so called from being carried high up to the bosom. The barrel is made of wood about an inch thick in the centre and half an inch at the heads, which are six and half inches (Chinese) in diameter. This is a purely modern instrument, and is much used by blind singers, as they saunter through the streets at night, to accompany their voices and to regulate the time of the song. It is always used in orchestras for what the Chinese call "small music"—that in which instrumentalism plays a very secondary part. The *Wai-ku* made at Soochow are deemed the best.

20.—The *Tai-ku* 提鼓, an ancient military drum fitted with a handle. It is held by the commander of a company, who strikes it as he mounts his horse.

21.—The *Yü-ku* 魚鼓, "Fish Drum," or more properly speaking "fish tambourine," is made of a joint of bamboo two feet long and two inches in diameter, one end of which retains its natural filling,

while the other is covered by fish skin. A vibrating tongue of bamboo projects through the skin, which is played upon with the fingers to produce sounds.

(b) Instruments constructed of Wood only.

22.—The *Chu* 柷, a wooden instrument now obsolete, made of *Chiao-mu*, a wood resembling the pine in texture with leaves like those of the cypress. It resembled a square box, but was larger at the top than at the bottom, and was in fact made in imitation of the old grain measure, being twenty-four inches long by eighteen deep, though its precise capacity is not stated. To the bottom was attached a sort of clapper, of which the cross-head attached to the upper part is alone visible in the engraving. Through the hole in the front a stick was passed to shake the clapper. It was used in ancient musical entertainments to start and stop the performance—a rather cumbrous mode, one would think, of producing a very simple result. See FIG. 5.

23.—"Castanet-boards," *Pai-pan* 拍板, two pieces of wood joined together and beaten with a third. A common instrument both formerly and now. See FIG. 9.

24.—The "Finale Box," as Bridgman calls the *Yü* 敔, is made in the form of a tiger couchant upon a square box, measuring three feet six inches in length, one foot eight inches in width and a foot high. From the back-bone of the carved animal project twenty-seven saws like teeth, or *Tsu-yü*. A piece of wood, a foot long and about an inch square, is used to strike the head of the figure to beat time, and is passed rapidly along the projections from the back to stop the music. See FIG. 11.

25.—The *Chung-tou*, or "Planchettes," consist of twelve slabs of bamboo an inch thick and about thirteen inches long. In the upper end of each is bored a hole, through which the cord, holding the slabs together, is passed. FIG. 13 shews three of these slabs, upon which a portion of one of the odes from the Shih-king has been engraved. The *Chung-tou* were simply bamboo books, and only come under the head of musical instruments on account of being frequently used at religious services to beat time; their construction ensuring the production of a sharp crepitating sound, when they were smartly struck against the palm of the hand. The general appearance of the *Chung-tou* is shewn in FIG. 14.

26.—The "Sounding Fish," *Po-yu* 卜角, is made of wood, shaped like a fish with longitudinal openings in the side, and the interior hollowed out. It is used by Taoist priests to mark time in the recitation of public and private prayers.

27.—The "Wooden Fish," 木角, is similar in shape and use to the preceding, and is made of all sizes, ranging from six inches to several feet in length.

(c) Stone Instruments.

28.—The *Pien-king*, or "Frame of Sonorous Stones"—FIG. 18 represents a wooden frame, upon which sixteen stones, cut to the shape represented in FIG. 19, and called *Ch'ing* 磬, are suspended by a cord (FIG. 6 represents a metal drum known by the same name). The drawings are so self-explanatory, that further details are almost needless. It may be noted that one leg of the *Hing* was always twice the length of the other. The Chinese assert that an instrument of this sort is yet in existence somewhere. Various other fanciful forms of sonorous stone instruments are shewn in the figures on the last two plates numbered 55 and 56.

"The instruments formerly used by the Emperors were made of jade stone; with princes the *Hing* was made of stone only; if they used the jade kind, they exceeded the limits of propriety." 天球 *Tien-kau*, the "Heavenly Ball," is another name of the *Hing*.

(d) Metal Instruments.

29.—The *Tai-lo* 大鑼, or "Large Gong," is cast of gong brass (to which reference has been made in the introduction) in the shape of a platter, is suspended by a string and struck with a stick. The diameter varies from a few inches to two or three feet. Those made at Soochow are the best, and realize higher prices than instruments cast elsewhere. These gongs are used in official yamêns, by soldiers and on board ship. As a matter of drill the sound of the gong orders retirement or retreat. See FIG. 21.

30.—The *Tan-ta* 單打, or "Single Stroke Gong," is a smaller variety made of copper, about six inches in diameter and two-tenths of an inch thick. It is a modern instrument much used at theatricals, singing entertainments and processions. Generally speaking a pair are used by each orchestra. See FIG. 24.

31.—Bells, 鐘 *Chung*, were anciently constructed of six parts of copper to one of tin, proportions which have only slightly altered in modern times. The early bells were made without tongues, being struck with a stick on the rim, and were square in shape, ornaments of various kinds being cast on the outer surface. See FIG. 20. The round bell is represented by FIG. 29. (See *Mémoires sur la Chine*, Vol. VI, p. 223 et seq.) A native account of the bell says:—It is hollow at the bottom, and admits a great deal of air, therefore its sound is great. The word "bell" is mentioned in the poetry of the Chow dynasty. It is also used to designate time, thus the 黃鐘, "yellow bell," stands for the eleventh month, 夾鐘, "double bell," for second month, 林鐘, "forest bell," for sixth month, and 應鐘, "echoing bell," for the tenth month.

32.—The "Long Bell," 鐸 *Toh*, was a larger bell with either a metal or a wooden tongue. In former times five soldiers composed a file, and five files formed a *Leung*, and the chief of the *Leung* carried a *Toh*, by striking which he conveyed orders to his men. A native description says:—"The word *Toh* means 'order,' and this bell was used to give orders. It was also used on the roads to give warning to people. The *Toh* is constructed of brass, but has a wooden or metal tongue. It was formerly used to enforce and illustrate points of morality and to give encouragement to literary attainments. In civil matters the wooden-tongued *Toh*, and in military matters the metal-tongued *Toh*, was used. It was used in the army in connection with the drum."

33.—The "Wind Bell," 風鈴 *Fêng-ling*, is usually taken to be the name of the small bell, hung at the eaves of houses and pagodas, the clapper of which, having a streamer attached to it, is waved by the wind. The bell, mentioned under this name by Chinese authors, appears, however, to have been of a different description. The *Fêng-ling* was, during the time of the Tang 唐 dynasty, suspended in the examination halls "to act as a warning" as the Chinese annalist puts it; and mention is also made of its use in battle to indicate the way, in which fortune inclined. Little, however, seems to be positively known as to the real size, shape, and use of the ancient *Fêng-ling*. With the modern bell of that name even European readers are familiar, as they are introduced into most pictures of Chinese pagodas.

34.—The "Sistrum Bell," 金錞 *Chin-shên*. The origin of the *Chin-shên* is referred to the times of the Chow dynasty. It is simply a large bell with small round bells, suspended in it to act

as a tongue, the sound thereby produced being exceedingly shrill. As in other cases only vague and childish accounts of its object and use are to be found in native works. Thus we read that "it was used in battles in concert with the drum." One account says that "it had a head like a hammer," and another says, "it resembled an ordinary bell with a tongue yielding a shrill sound."

35.—The *Pien-chung* 編鐘, or "Bell Rack," was arranged like the *Pien-king* (No. 28.) See FIG. 15.

36.—The "Bell Cups," two metal cups on curved handles struck against each other to produce a shrill ringing tone. See FIG. 22.

37.—The Brass or Copper Drum or Gong, 銅鼓 *Tung-ku*, is made in the shape of a waterman's hat. It is smaller than the common gong, and is used both on the stage and elsewhere in concert with the watch gong. An ancient legend relates that gongs of this description were used by Hung-ming 孔明 of the Han dynasty to mislead his enemies. He placed a number under the waters of a running stream, and the sound thereby caused was so loud and continuous that his opponents were terrified. It is possible, however, that this account refers to a real drum (and not to a gong) made of brass thoroughout both barrel and heads, an instrument which has never been included in the list of the Chinese orchestra. For the modern *Tung-ku*, see FIG. 23.

38.—The *Pien-lo* or *Wan-lo* 雲鑼, a "Chime of Gongs," an ancient form of which resembled Nos. 28 and 35 in arrangement. This is an ancient instrument now seldom met with, and like many other instruments dates back to the time of the three Emperors. The usual number of gongs used was nine, but more were occasionally used. A (possibly) more modern arrangement is shewn in FIG. 25.

39.—The "Temple Gong," the gong generally to be found in temples, and used in place of the more handy, but less powerful instruments above mentioned. See FIG. 26.

40.—The "Soochow Gong," *Su-lo*, is described as "shaped like a boiler suspended by the finger, and beaten with a corner of a small billet of wood."

41.—The "Watch Gong," 點子, is simply an ordinary gong used to strike the hours. It is sometimes included in the orchestra.

42.—"Cymbals," 鈸 *Poo*. These resemble the well-known instruments used in our military bands, being shaped like a Chinese rain-hat, and vulgarly called the "great" and "little clangs." The smaller kinds were invented by Mu-sze-so 穆士素 in the time

of Nan-chai 南齊 in the after Tang dynasty. The larger sort were first brought from India, whence, it is supposed, we ourselves derived them. Leathern thongs or straps afford a hold in the Chinese as in the English cymbals. The clang of these instruments is peculiarly characteristic of all native theatrical performances, processions, etc. See FIG. 36.

43.—The *Fong-heung* 方響 was originally the name applied to a piece of sonorous stone, but subsequently to oblong iron plates, sized according to tone, and suspended on a frame much as shewn in figure 18. Ten of these were usually suspended in two rows.

(e) Glass and Porcelain Instruments.

44.—"Wind Glasses," 晌碼 *Hsiang-ma,* fancifully called "the hibiscus suspended by golden threads," are small pieces of glass suspended from hoops by silken strings, and driven against each other by the wind, so producing a tinkling noise. About ten or twenty are generally suspended from one hoop. They are a common ornament of summer houses, etc.

45.—"Musical Cups or Vases" 甄. Twelve of these are taken and modulated to form an octave of notes by pouring in water. They are played on with slender iron rods. Many English readers will have seen at home itinerant players on "the musical glasses," who use a precisely similar contrivance; the only distinction being that with us the wetted finger is passed over the edge of the glass instead of the latter being struck with a rod.

46.—The "Sounding Vase," 古缶 *Ku-fau.* A hollow porcelain vase somewhat about the size and shape of the common tea urn, and yielding a metallic sound when struck.

2. WIND INSTRUMENTS.

47.—The *Hsüen* 塤, or "Porcelain Cone," pointed at the top and flat at the bottom, being of the size of the egg of a wild goose. FIG. 27 shews two forms, both having holes at the apex, with three and two holes respectively on the front and back. The *Hsüen* is reputed to be the earliest Chinese wind instrument invented, and a brief account of the way, in which it was originally made, has been given in the introduction. The open note, produced by blowing into it, is much like that of a dove's coo. Two sizes are spoken of in native annals, viz:—the *Ya-hsüen* 雅塤, or "decorous hsüen," and

the *Sung-hsüen* 頌塤, or "hsüen used in praise." Ancient as this instrument is, it is not quite obsolete, though the modern forms have eight holes (two in front and five at the back, besides the embouchure). It was and is chiefly used at religious services.

48.—The *Lu*, or sounding pipes, though not strictly speaking an instrument until combined for the purpose, are shewn in FIG. 28, the drawing being taken from Amiot's work. Space does not allow me to give the minute calculations detailed by the worthy Father as to the precise length, area and capacity of each pipe. Those curious on such matters can themselves refer to his work. Perhaps the strangest fact in connection with the discovery of the *Lu* is the very small progress made towards utilizing them for orchestral purposes, the pan pipe and gourd organ (both described below) being the only developments of the most valuable means of producing tone known to western civilization.

49.—The *Chieh*, or central embouchure flute. Three sizes of this were formerly made, but it is now nearly obsolete. A stopper filled each end of the tube, the centre of the instrument being placed against the mouth. See FIG. 30.

50.—The *Yo*, or flute blown from the end. This instrument was held to the mouth like a pan pipe. Both this and the *Chieh* were about the size of the common German flute, but have become obsolete in favour of the *Ti-tzu*. See FIG. 30A. The interior of the embouchure at the end is shewn in FIG. 33.

51.—The *Ti* 笛. Two flutes were known under this name, the one having six and the other three holes. The stopper at the end is bored to admit the passage of air, and the instrument is blown like a flageolet or clarionette. See FIG. 31.

52.—The modern *Ti-tzu* 笛子, which has now taken the place of the preceding, has seven holes besides the embouchure, that nearest to it being covered with a thin membrane, which produces a peculiar reedy sound. The tube is usually bound round with waxed silk, with tassels, etc., as shewn in FIG. 32. Another form of the same instrument is shewn in FIG. 35, the embouchure being placed at right angles to the finger holes.

53.—The "Hour Horn," 畫角 *Hwa-chioh* (flowery or painted horn), is a military brass instrument, blown morning and evening to mark the time, like our reveillé and tattoo. It is, however, frequently heard in processional orchestras. Another name of this instrument is *Wu-tung-chioh* 梧桐角, it is said to have been used by Hwang-ti 黃帝 to exercise his troops. This name is now given to a children's toy answering to our penny trumpet.

54.—The "Flageolet," 响笛 *Hsiang-ti*, consists of a single wooden pipe with a copper bell, blown like our own flageolet. It has six holes, the mouth-reed being different in arrangement to that of the western instrument. See FIG. 38. An ancient instrument of this description was called *K'a* 笳. The Princess Man of Choi was famous for her mastery of this instrument.

55.—The *La-pa* 喇叭, a large horn, is a military instrument vulgarly called the 號筒, or blowing horn. See FIG. 40.

56.—The "Copper Clarionet," 鎖吶 *So-na*, is like the funeral pipe, and has seven holes like the ordinary flute. It is a modern instrument also known as the *Hoi-ti* 凱笛. It is made of brass with a wooden pipe at the bottom in the shape of a flute. Chiefly used on joyful occasions.

57.—The *Ho-tung* 號筒, or "Trombone," is made of wood, copper-lined. It is used similarly to the *La-pa* (No. 54). See FIG. 37.

58.—The "Conch," 海螺 *Hai-lo*, is a large sea-shell with turbinated volutes having a hole bored in the apex, through which to blow. Much used by watchmen, etc. See FIG. 39.

59.—The "Clarion," 札角 *Cha-chioh*, is formed from a sheet of copper made into a crooked pipe. It enclosed a smaller copper tube drawn out when wanted for use.

60.—The "Fife," or 籥 *Yueh*, is a flageolet made like the flute with three holes. This is said to have been introduced by the Emperor Fu-hi. A Chinese account says that "it was first used in the time of the Chow dynasty at official sacrifices. The sons of Prince Wan of Chow 周文王 studied this instrument." The sort of fife known as the *Siu* 簫 is said to have been invented by the Emperor Fu-hi 伏羲. The Emperor Shun 舜 also invented a sort of fife "of irregular shape resembling a phœnix(?) wing," which was two feet long, had ten holes and was blown from one end. The largest fifes made have twenty-four holes, and a smaller variety has sixteen holes. A fife called *Po-ya-siu* 博雅簫 has twenty-three holes, and is open at both ends. The small fife known by the same name has sixteen holes, and is fourteen inches in length.

61.—The *Pa-liu* 巏嘹 is an ancient reed instrument resembling the flageolet. It had nine holes, and produced a very shrill and sorrowful sound.

62.—The *Lü* 律, or Chinese pandean pipes, formerly had twelve pipes, but a commoner form is shewn in FIG. 41, in which sixteen

pipes are placed together. The open part of the pipe is at the bottom, the drawing having been accidentally reversed. The proper pandean pipe has the longest pipe in the centre, the whole being arranged like the "show pipes" of our organ. The instruments, some of which were highly ornamented, were called indifferently *Siu* 簫, or *Lü* 律, but the former term is usually taken to refer to the fife already noticed (No. 60).

The foregoing instruments generally are extremely rude, being mostly shrill in tone and very difficult to play upon.

63.—The "Reed Organ," 笙 *Shêng*, is made of a gourd, into the upper surface of which bamboo or reed tubes are inserted with cement. It is said to have been invented by 女媧氏, one of the mythical sovereigns, and in Chinese belief dates back to a purely fabulous age. It is not, however, as perfect as the *Hü*, a description of which will to a great extent serve for both.

64.—The *Hü* 竽 is a twenty-four or thirty-six tubed reed organ, and the most perfect instrument of the sort yet invented by the Chinese. According to the "Rites of the Chow" the extreme length of the *Hü* is forty-two inches, the tubes which are made of bamboo being of various length, as shewn in FIG. 42, thus as the native work describes them "resembling the feathers in a bird's wing." It only differs from the *Shêng* in having a larger number of reeds. The reeds are arranged around the circumference as shewn in FIG. 43. These tubes (the lower part of which are cut into the shape shewn in FIG. 34) have ventages near the base, as shewn in the drawing, to prevent their sounding until stopped by the finger of the performer. The mouth-piece called *Wang* 簧, and somewhat resembling the spout of a kettle, is inserted into the gourd at the side, a little chunam or other cement being used to make the joint air-tight. The proper way of playing both upon this and upon the *Shêng*, is by sucking, but sounds can also be produced by blowing. Now-a-days, both instruments have nineteen tubes, but are sufficiently different in size to be regarded as distinct.

3. STRINGED INSTRUMENTS.

65.—The "Copper-wire Harmonicon," 洋琴 *Yang-chin*, has nails at each end, upon which ten or more copper threads are stretched, and which are beaten by slips of bamboo (FIG. 45). The board of this instrument resembles the frustum of a triangle, and the

strings decrease in length from the base upwards, being fastened securely upon the nails. There are two sets of strings, made by placing the bridges at different distances from the pegs, and causing the wires from one side to pass over the one bridge and under the other. See FIG. 44.

66.—The "Flat Lute," 箜篌 *Hung-hau*, an ancient instrument used in the time of the Han dynasty, more especially in sacrificing to the God of Earth. It formerly had twenty-five strings, and was greatly cultivated. In the time of Han Ling-tai 虞靈帝 the number of strings was reduced by two. It was played with both hands like the *Yang-chow*. See FIG. 46.

67.—The "Small Lute," 掌 *Chang*, was originally a twelve-stringed instrument, but, latterly, one Kwong-hsin 蒙恬 introduced a thirteenth. "The upper surface of the *Chang* is round to represent heaven, the bottom flat to represent the earth, and the interior is hollow." This instrument is now-a-days much used by blind beggars. See FIG. 47.

68.—The "Many-stringed Lute," 瑟 *Shê*, (a form of *Chin*, which see No. 70), a sort of lute which now reckons at least five varieties, two of twenty-five and the others of nineteen, twenty-three, and twenty-seven strings, respectively. The inventor of the first lute is said to have been one Pao Hi-shih 庖犧氏, who gave it fifty strings. According to a native legend, "a damsel was one day playing this extensively furnished instrument before the Emperor Hwang-ti 黃帝, who, being rendered sorrowful by the music, decreed that henceforth its strings should be reduced by one-half." The twenty-three stringed lute owes its origin to Chu Shang-shih 朱襄氏, who constructed a lute of five strings. This was improved on by one Ku Sau 瞽瞍, "the blind Sau," who made a fifteen stringed instrument of it. Eight strings subsequently added made a total of twenty-three. Many lutes otherwise precisely the same have, however, only nineteen strings. The fourth variety, which like the first has twenty-five strings, is occasionally used on joyful occasions, and is seventy-two inches in length, its width being the same as that of the ordinary lute above described. A variety of this latter, eighty-one inches in length and eighteen inches wide, has twenty-seven strings; it is known as the *Sha* 灑. See FIG. 48.

69.—The *Sau* 縔, or ordinary "Seven-stringed Harmonicon," is like the instrument described at No. 65, the only difference being that it has but seven strings. It is played with a bamboo plectrum 撥 *Po*.

70.— The "Scholars Lute," 琴 *Chin.* This much be-praised instrument stands at the head of the Chinese orchestra, occupying in native eyes the position taken by the violin in our own. It is in fact the only one with any pretensions to what we consider a real power of musical expression. Three sizes are in vogue differing only in lineal measurement. The body of the *Chin* is made of *Tung-mu* a hard-grained wood stained black. The largest variety is five feet five inches in length, nine inches wide at the head, and six at the other extremity, the shoulder having a width of ten inches, and is strung with seven chords. The original *Chin*, said to have been invented by Fu-hi, had only five chords, two being added subsequently. A large amount of trouble has been expended by the Chinese in accurately describing the instrument, and Amiot devotes several pages of his monograph to the same purpose. Dr. Williams in his "Middle Kingdom," (Vol. II, p. 168) gives a very accurate sketch of the *Chin* (or in southern Mandarin *Kin*) which I here quote. "The *Kin*," he says, "is very ancient, and derives its name from the word *Kin*, to prohibit, 'because it restrains and checks evil passions, and corrects the human heart.' It is a board about four feet in length and eighteen inches wide convex above and flat beneath, where are two holes opening into hollows. There are seven strings of silk, which pass over a bridge near the wide end through the board, and are tightened by nuts beneath: they are secured on two pegs at the smaller end. The board is divided by thirteen studs, so placed that the length of the strings is divided first into two equal parts, then into three, etc., up to eight, with the omission of the seventh. The seven strings inclose the compass of a ninth or two-fifths, the middle one being treated like *A* upon the violin, viz: as a middle string, and each of the outer ones is tuned a fifth from it. This interval is treated like our octave in the violin, for the compass of the *Kin* is made up of fifths. Each of the outer strings is tuned a fourth from the alternate string within the system, so that there is a major tone, an interval tone less than a minor third, and a major tone in the fifth. The Chinese leave the interval entire, and skip the half-tone, while we divide it into two unequal parts. It will therefore readily appear, that the mood or character of the music of the *Kin* must be very different from that of western instruments, so that none of them can exactly do justice to the Chinese airs. One of the peculiarities in performing on the lute is sliding the left hand fingers along the string, and the trilling and other evolutions they are made to execute."

To the foregoing I add a description *à la Chinoise*, translated for me by a Hongkong friend, Mr. Chun Ayin, to whose assistance I am greatly indebted for such details in these necessarily imperfect notes as are hitherto unpublished. "The 琴 *Chin* (Cantonese *Kum*)" he says "or lute, was originally made by Shin-nung, the God of medical practitioners, and one of the very ancient Emperors. At first it had only five strings, but in the Chow dynasty, two more strings were added. It was intended by the introducer to promote self-control, being supposed to control lasciviousness, and to bring man's mind to a proper state of uprightness. In Fuh-hsi's 伏羲 time, he pared the 桐 *Tung* tree to make this lute. It was round on the top, to resemble the firmament, the bottom was square to represent the earth. It had a long orifice, called the 'Dragon pond' 龍池, it was eight inches wide to indicate the eight winds; it had also a small orifice called the 'Phœnix pond;' it was four inches thick to indicate the four atmospheres. The lute was thirty-six inches long to represent the three hundred and sixty days of the year. It was six inches wide, to indicate the 'six agreeables' 六合. It was large in front and small at back, to indicate the grades of high and low. It was round at top and square at bottom to indicate heaven and earth. It had five strings to indicate the five elements of nature. The large string was to represent the King, and the small strings his subjects. The addition of the two strings was to represent the civil and military, and were typical of the cordiality that should exist between the Emperor and his subjects. The strings were known by distinctive names. The first string was called Koong 宮, the next Shang 商, the next Chioh 角, the next Yü 羽, and the next Ching 徵. The additions were named the Siao Koong 少宮, and Siao Shang 少商. The body had what was called a head, a tail, a lip, legs, stomach, back, waist and shoulders. There was another orifice called the 'Dragon's lip.' It had also legs called 'Phœnix legs,' the neck was called the 'Genii's waist,' and there were also holes known as the 'fair damsels,' 越 *Üt*. The names of the different parts of the instrument were so many that it is difficult to enumerate them." See FIG. 49.

71.—The "Two-stringed Fiddle," 二絃 *Urh-hsien*, is a modern, but very rude form of fiddle with two strings; the pole answering to the neck of a violin is a strait stick of either bamboo or hard-wood, and is inserted crosswise into a bamboo cylinder cut from a joint, which does duty as a sounding board. The joint is three inches

deep by one and eight-tenths of an inch wide. The two strings, one thicker than the other, are fastened at the lower end of the stick, whence they pass over a bridge on the cylinder to the head, where they are tightened by two pegs. The bow-string passes between the strings, so that it is particularly difficult to play upon correctly. The *Urh-hsien* is only used upon joyful occasions, and never at funerals. It is perhaps the most universally played-upon instrument in China, but the melody it produces bears to European ears a strong resemblance to that made by an ill-greased cart-wheel. See FIG. 50.

72.—The *Ti-chin* 啼琴 is, with the *Urh-hsien*, the only Chinese instrument played with a bow. It resembles the last-named in outlines, but the bamboo cylinder is here replaced by half a cocoa-nut shell, the open part of which is covered with a thin board. The pole of the *Ti-chin* is fifteen inches long, but the arrangement of the pegs, strings, bridge, etc., is the same as that of the *Urh-hsien*. This is a favourite instrument with blind men. It is peculiarly harsh or gruff—much more so than No. 71—and hence we may presume Bridgman's application to it of the words "base fiddle." See FIG. 51.

73.—The *Yuen-han* 阮咸, or "Four-stringed Guitar," is a now obsolete instrument with a round body and short neck. It was played with a horn plectrum.

74.—The "Bamboo Guitar," 竹鋼鼓 *Chu-tung-ku*, was made by cutting four or five strings in the cuticle of the bamboo, and then elevating them by a bridge. It is now a mere child's toy, nor could it at any time have been capable of producing much sound.

75.—The "Three-stringed Guitar," 三絃 *San-hsien*, has a drum-shaped cylindrical body about four inches by three in diameter, and from one and half to two inches in thickness. This is covered with snake's skin, the sort used being that of a common boa which abounds in south China, and even in British Kowloon and Macao attains a respectable size, specimens fifteen feet in length having been captured at the latter city. A bridge rests on the drum, over which the strings, tuned in fourths, are stretched in the usual manner. The *San-hsien* is usually played as an accompaniment to the *P'i-p'a*, its sound being low, and dull, and deficient in character. See FIG. 53.

76.—The *P'i-p'a* 琵琶, or "Balloon-shaped Guitar," described by the Chinese as resembling a ham, has a body like the egg of a goose nearly a foot in diameter with four strings, which are played with

the fingers. It is about three feet long, which length is held by the Chinese to typify the three powers—Heaven, Earth, and Man. The four strings represent the four seasons. These fanciful references to nature occur throughout all Chinese works in any way alluding to native instruments. The precise origin of the *P'i-p'a* is unknown, but there seems to be evidence that it dates back to the time of the Tsin 秦 dynasty. Upon the neck table are inserted twelve frets so as to guide the player. "The strings are tuned at the intervals of a fourth, a major tone and a fourth, so that the outer strings are octaves to each other. The player usually avoids semi-tones as far as possible." See FIG. 52.

77.—The "Moon Guitar," 月琴 *Yueh-chin*, is so called from the shape of the sound-board, consisting of a circular piece of wood an inch thick and about eight inches in diameter. It has four strings of silk, which stand in pairs tuned as fifths to each other. Bridgman says that the *Yueh-chin* resembles in general contour the theorbo or arch-lute of Europe; this latter, however, has ten strings, while the *Yueh-chin* never has more than four. Upon the neck of the moon guitar are a number of raised frets for the convenience of fingering, the strings being struck briskly with the nail, or a plectrum in the right hand. See FIG. 54.

78.—The *Su-chun*, or "Standard Lute" of Prince Tsai-yu, was a *Chin* supposed to be so theoretically correct, that its twelve strings yielded exactly the notes of the twelve *Lu* or tubes, which as pointed out (see supra) form the standards of Chinese tone. The native description, copied by Amiot, runs as follows:—"In order that the *Su-chun* may have all the qualities required by the ancients to represent the perfection of their music, the wood known as *Tung-mu* must be employed in its construction. In form it is between the *Chin* and the *Chieh*. It must be of equal size throughout, having two round openings in its under part, the upper surface being covered with a layer of black varnish. The total length of the instrument should be fifty-five inches (the 'complete number' of heaven and earth) and its length between the bridges fifty inches, the number of the great expansion." Various other details of measurement are then given, each referring to some fancied connection between numbers and nature. Thus the twelve strings represent the twelve moons of the ordinary year. The butt-board at the upper end must be three inches in height, because each of the four seasons comprises three lunations—and so on. It would neither interest nor amuse to copy out these details in full, but

such readers as desire further information may be referred to the *Mémoires*, Vol. VI, p. 149 et seq., where they will find it exhaustively recorded. It does not, in conclusion, seem that any such standard instrument as the ancient *Su-chun* is now in existence. It is represented by FIG. 45.

79.—Some additional words used to describe either parts of, or adjuncts to Chinese musical instruments may here be added:—

"Chaff balls," 拊 *Fu*, are leather bags stuffed with chaff, used in beating time.

A *Chüh* 筑 is a frame made of bent bamboo, which is sometimes used in place of the solid body of the *Shê* 瑟 (see No. 68), and upon which are stretched thirteen strings.

Fuu 缶 is an earthen instrument "used to regulate time"—a use which by the way the Chinese attribute to almost everything percussive included in their orchestra.

Pa 撥 is a plectrum used to strike the strings of the harmonicon.

To-chia 套甲 is a nail plectrum, fitted on the finger as a false nail.

Chan 軫 is a peg similar to those in the head of a violin for tightening the strings.

Chü 柱 is the bridge resting on the sound board, over which the cords of stringed instruments are passed.

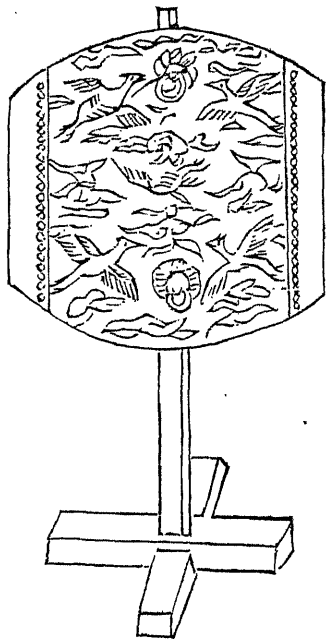
Yü 簴 is the frame, on which a bell is suspended. The head of the frame is like a deer, and the body like that of a dragon, carved.

Ching 鉦, or 鉦, is another name for 鑼 gong.

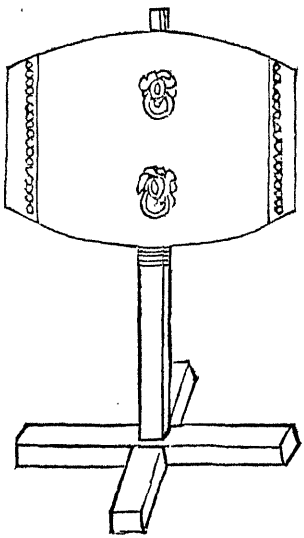
Koon 琯 is a stone tube, made into a flute having six holes—rather as a curiosity than for practical use.

Yoong 鏞 is the name given to a large bell.

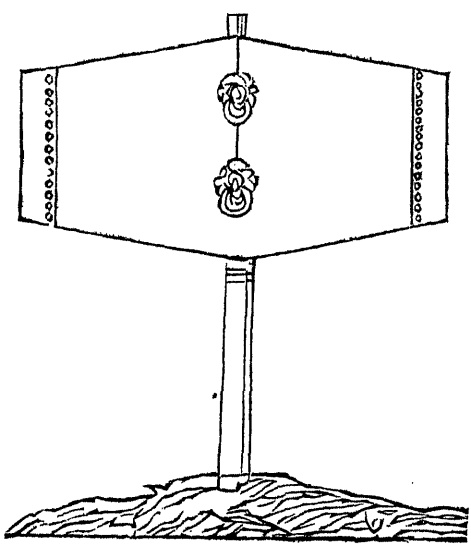
Chi 篪 is the name of an ancient bamboo flute, fourteen inches long and three inches in circumference. It had seven holes, and a hole on the under side of the tube.



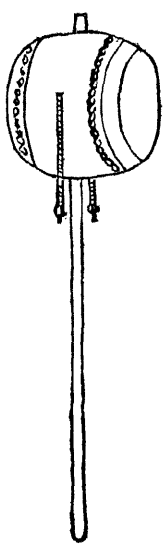
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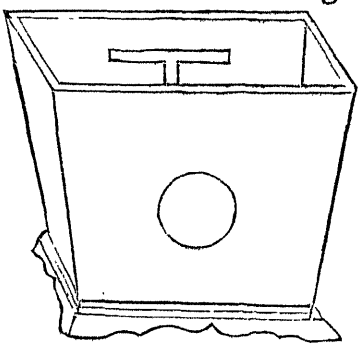


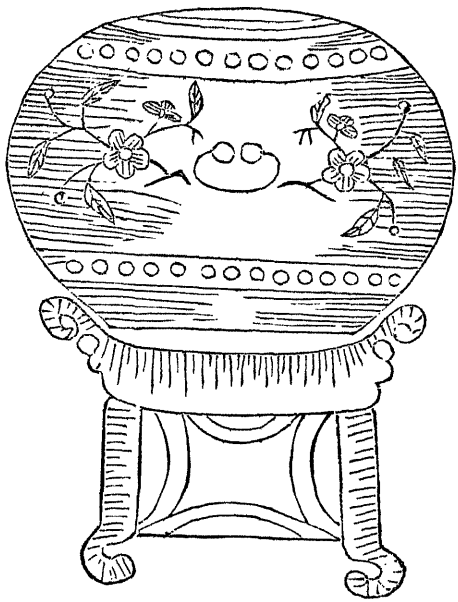
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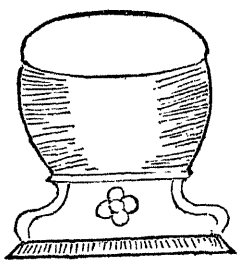


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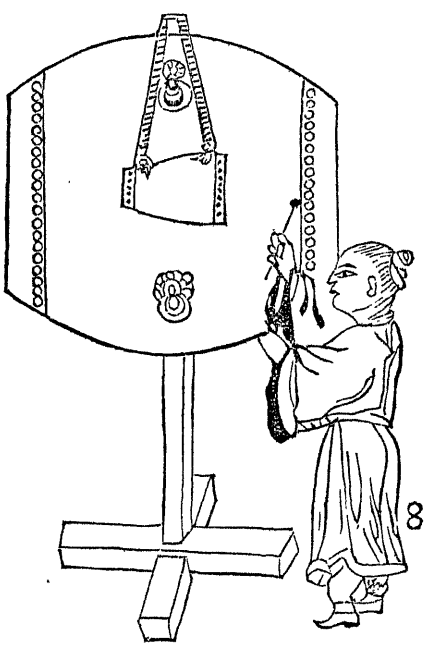




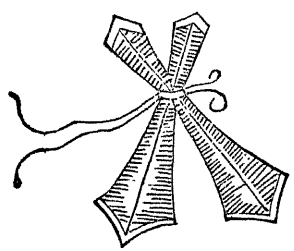


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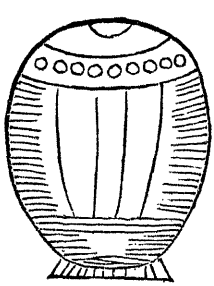
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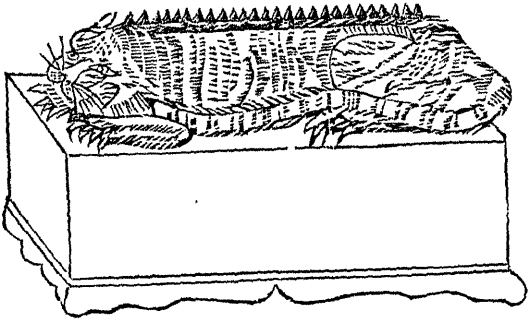
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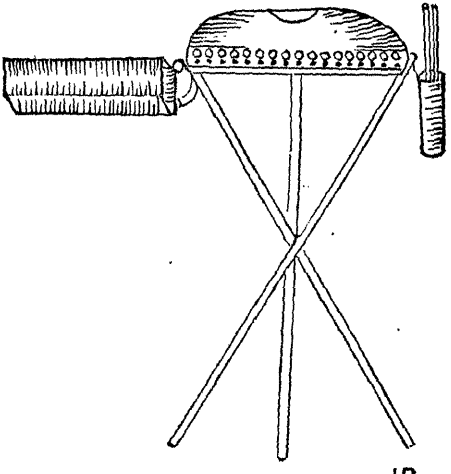
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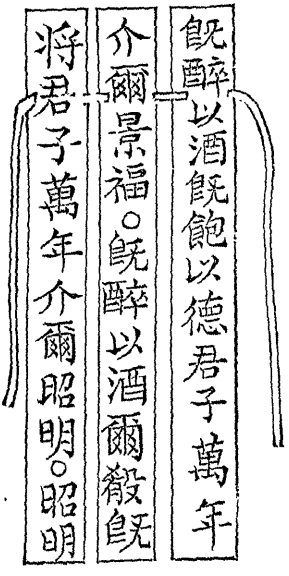
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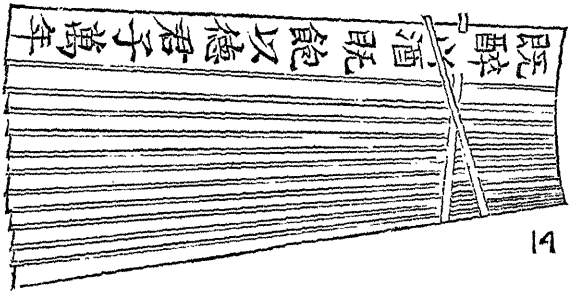
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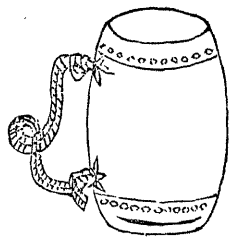
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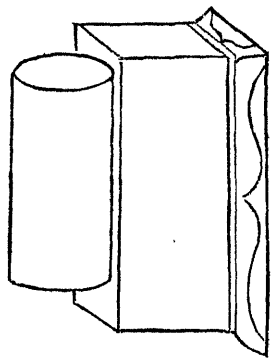
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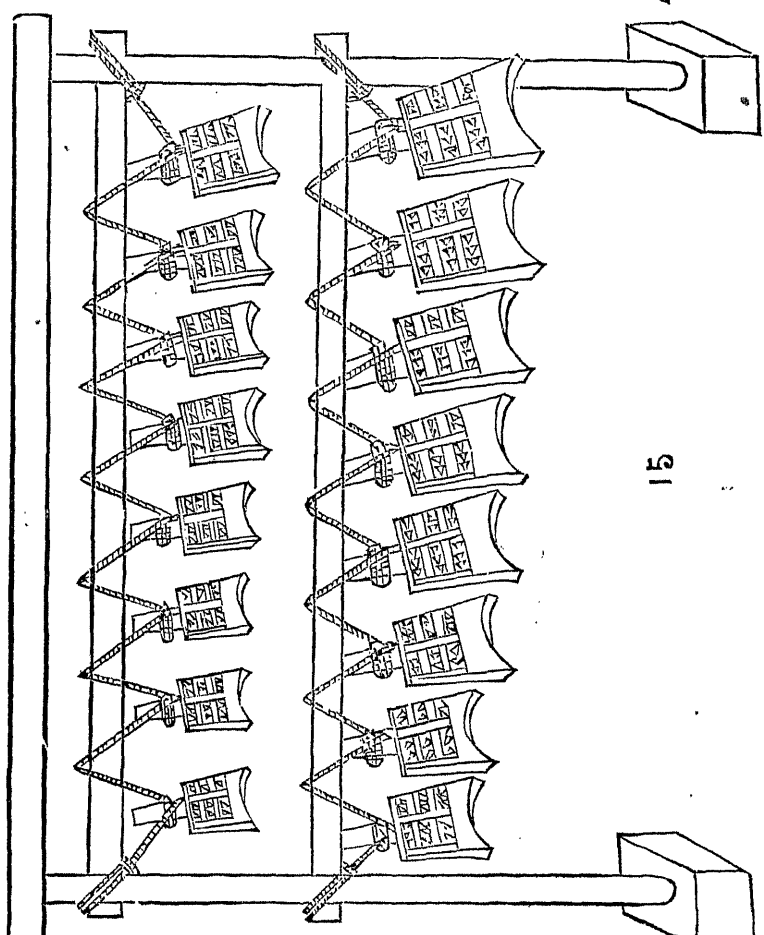
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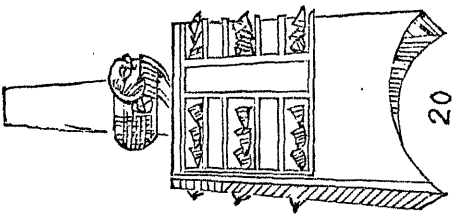
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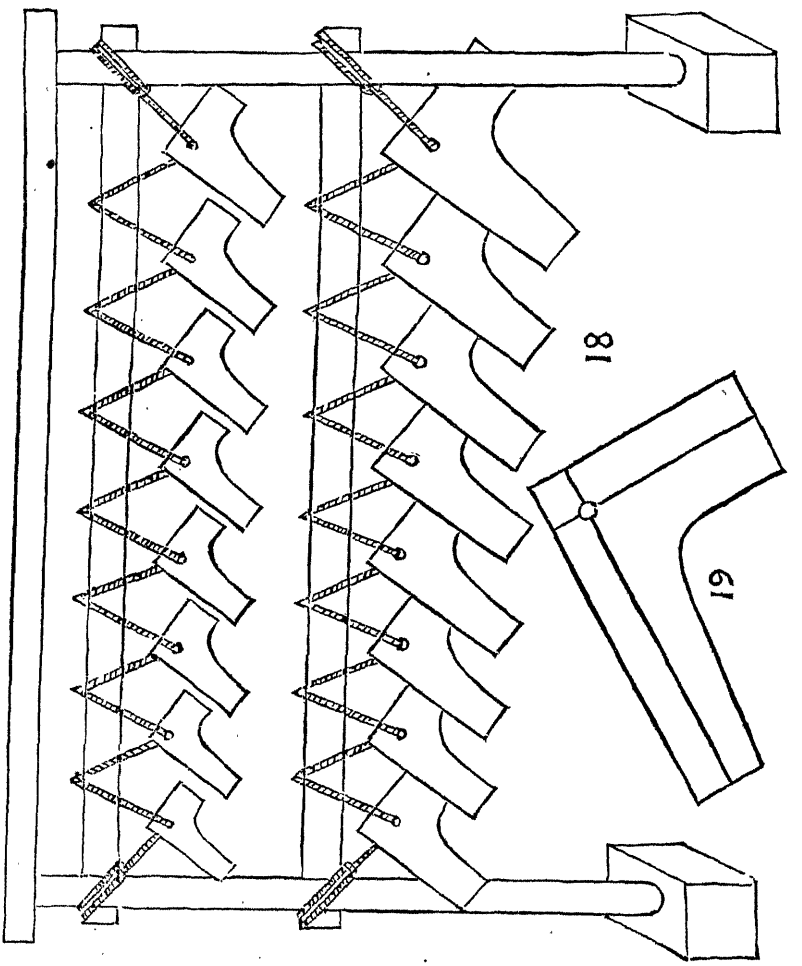


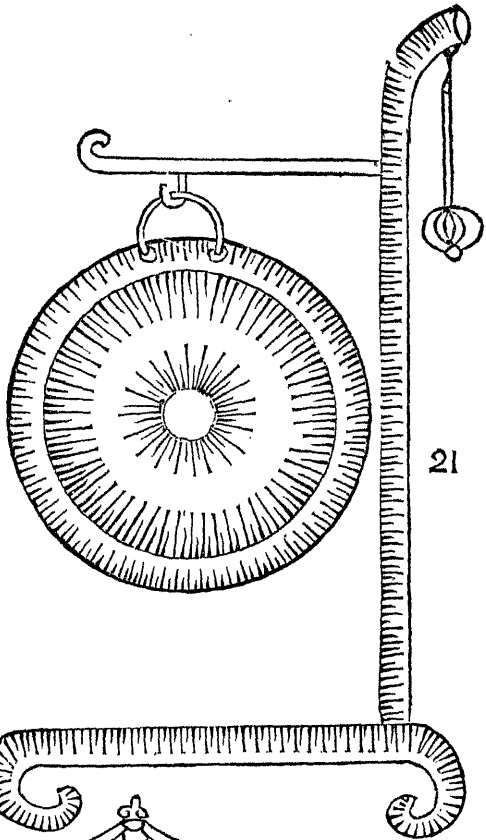
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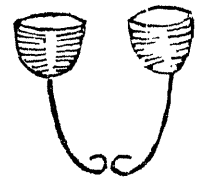
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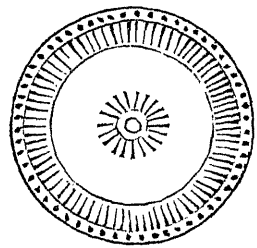

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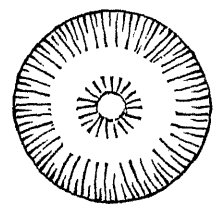
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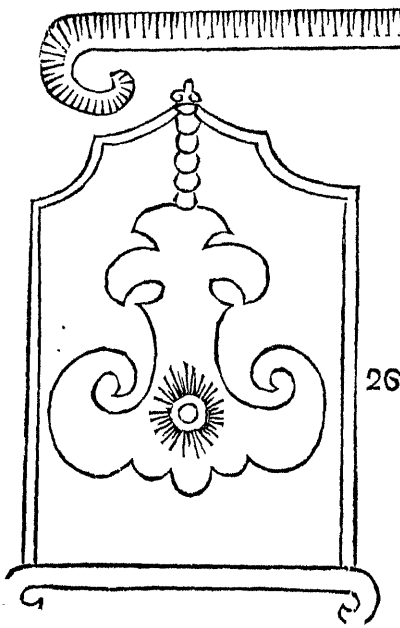
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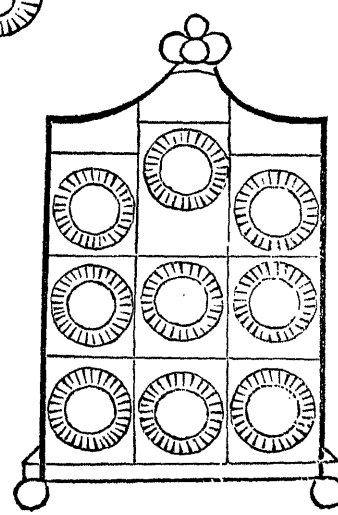
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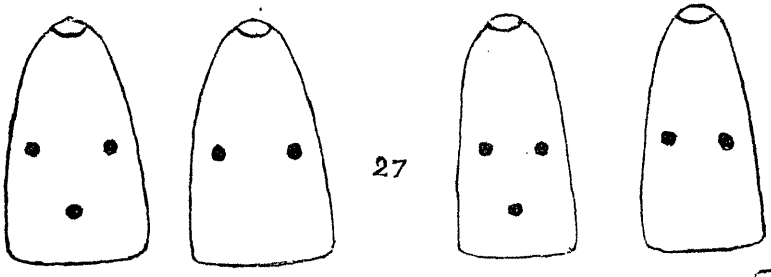
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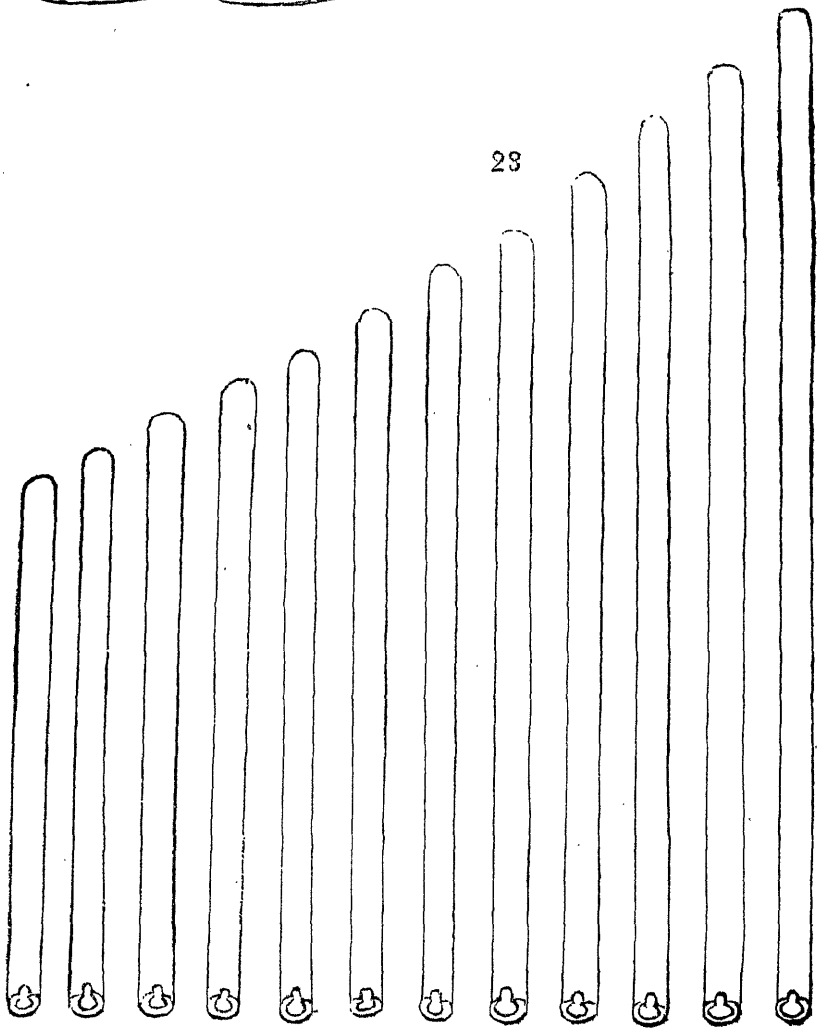
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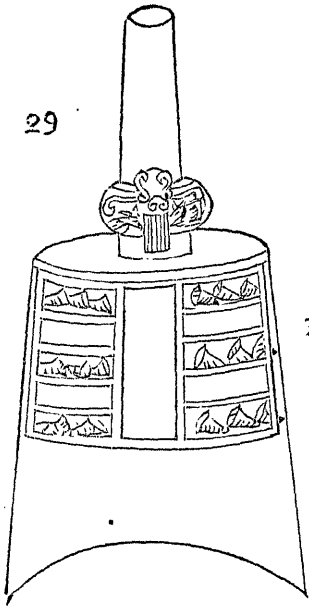
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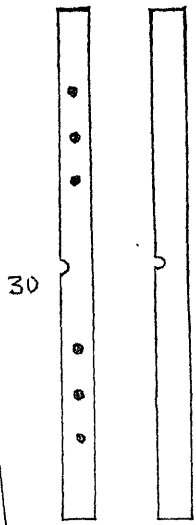


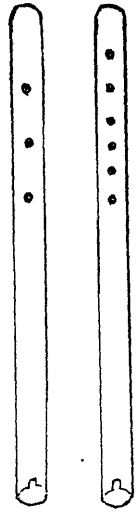
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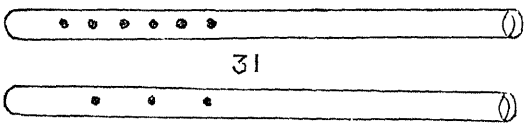


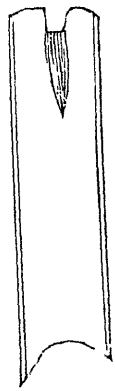
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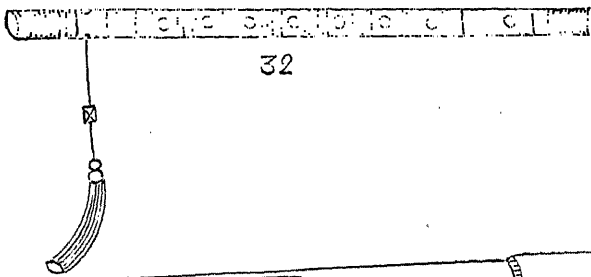

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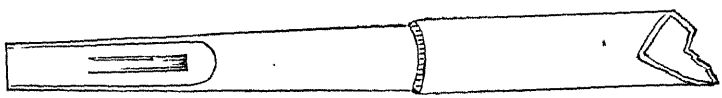

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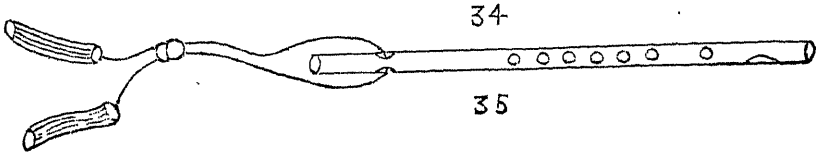

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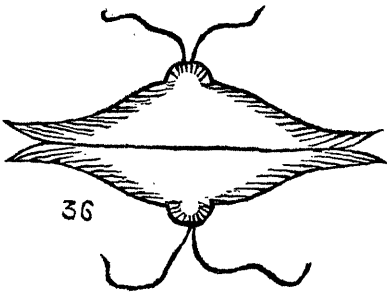

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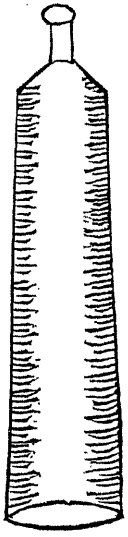

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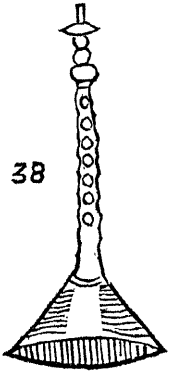

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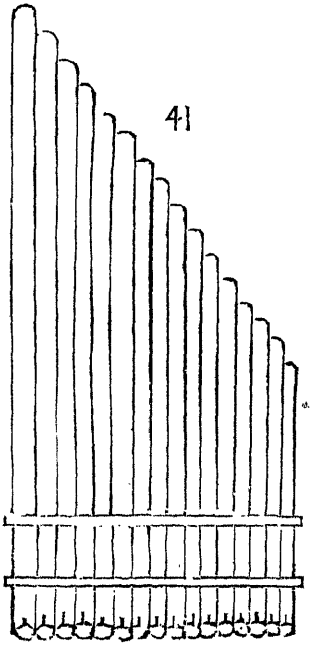

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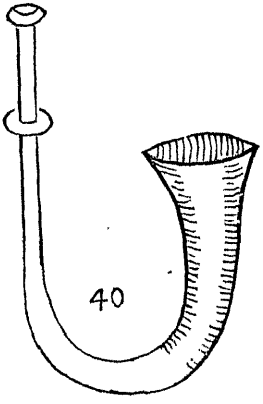

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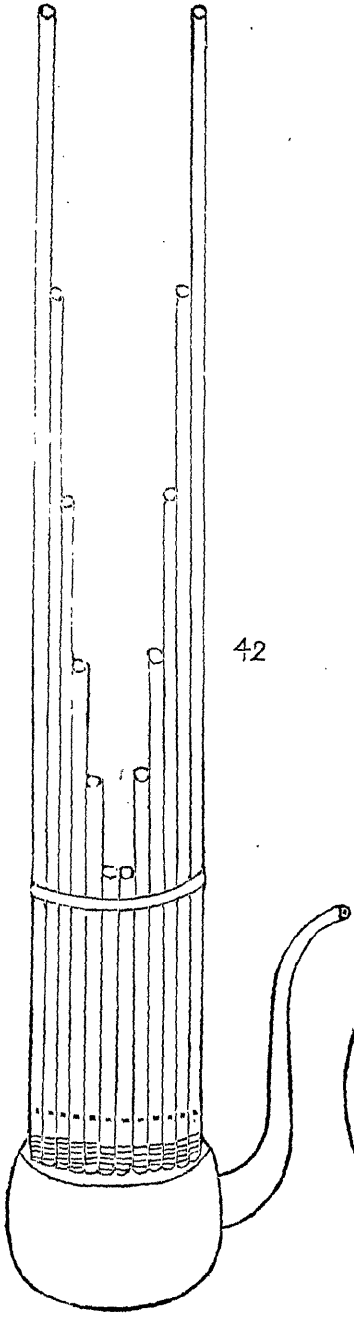

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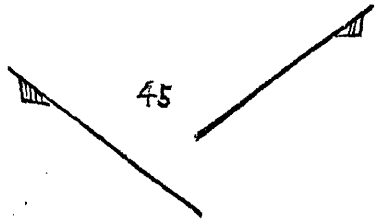

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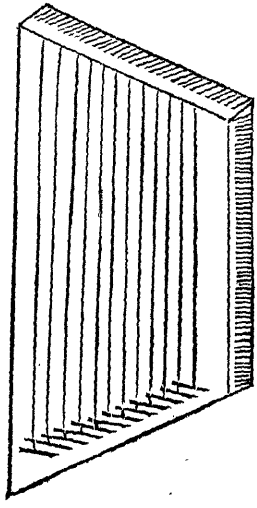

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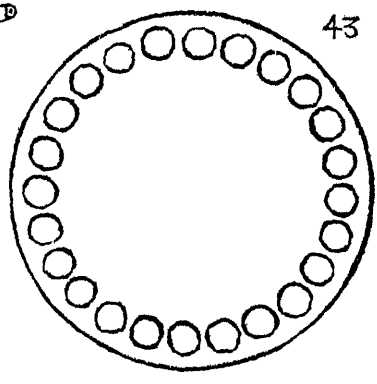
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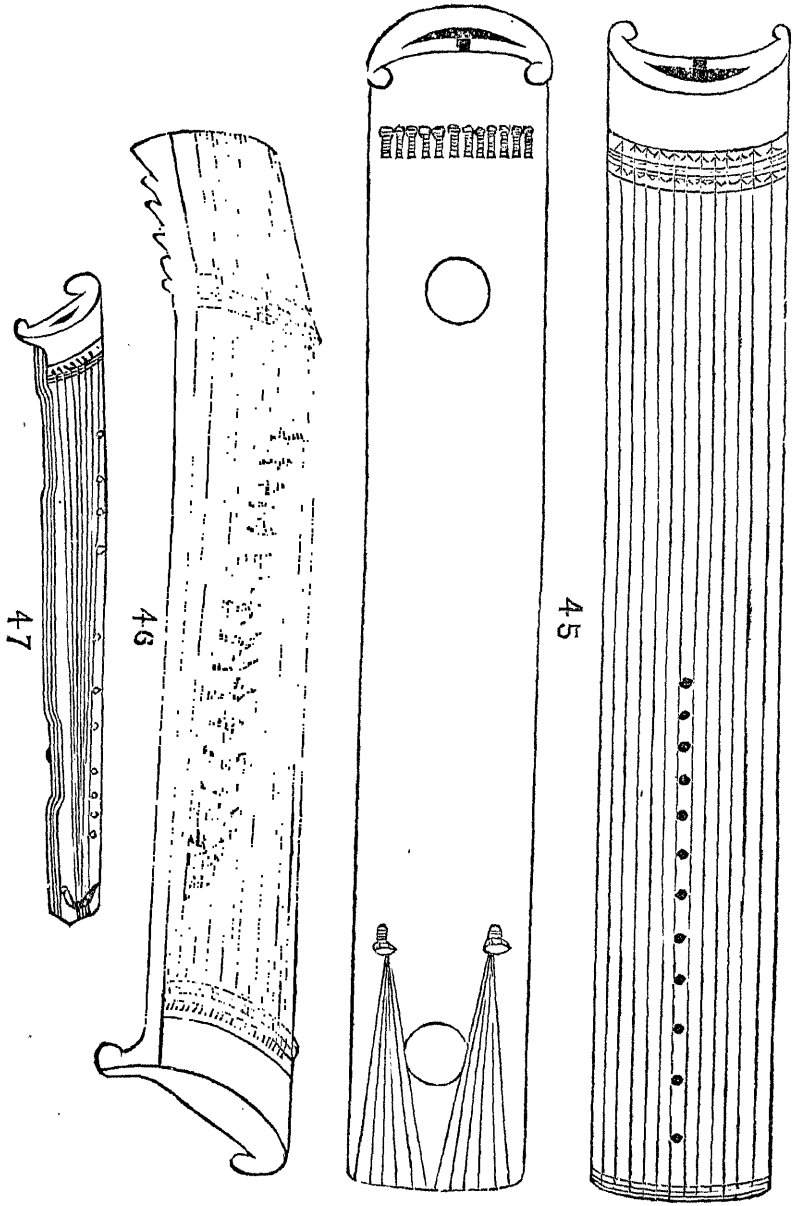
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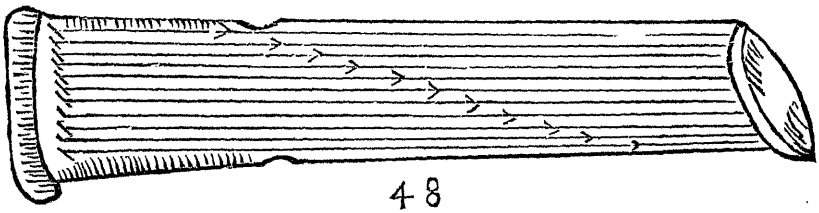


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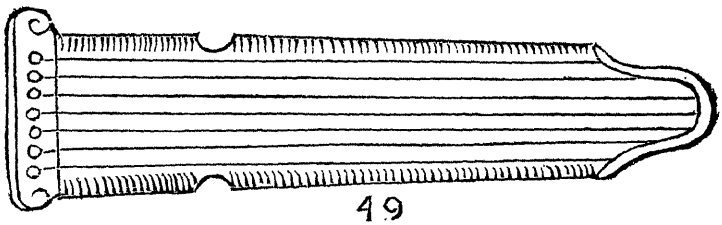


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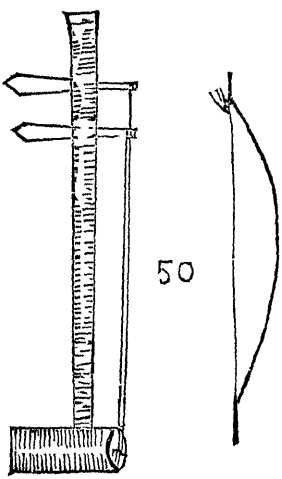

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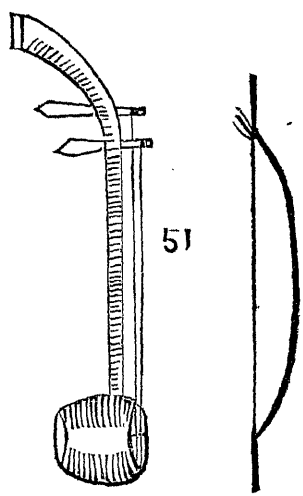
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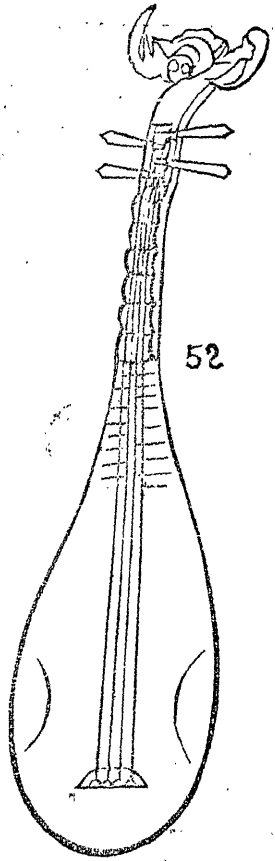
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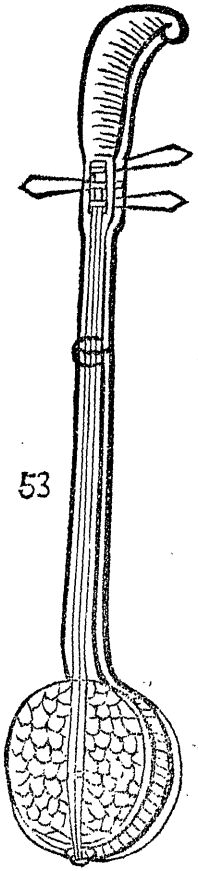
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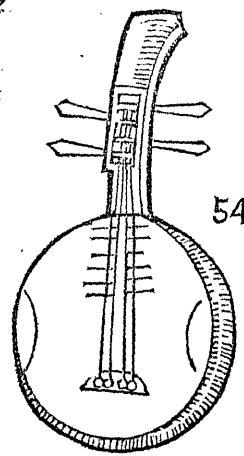
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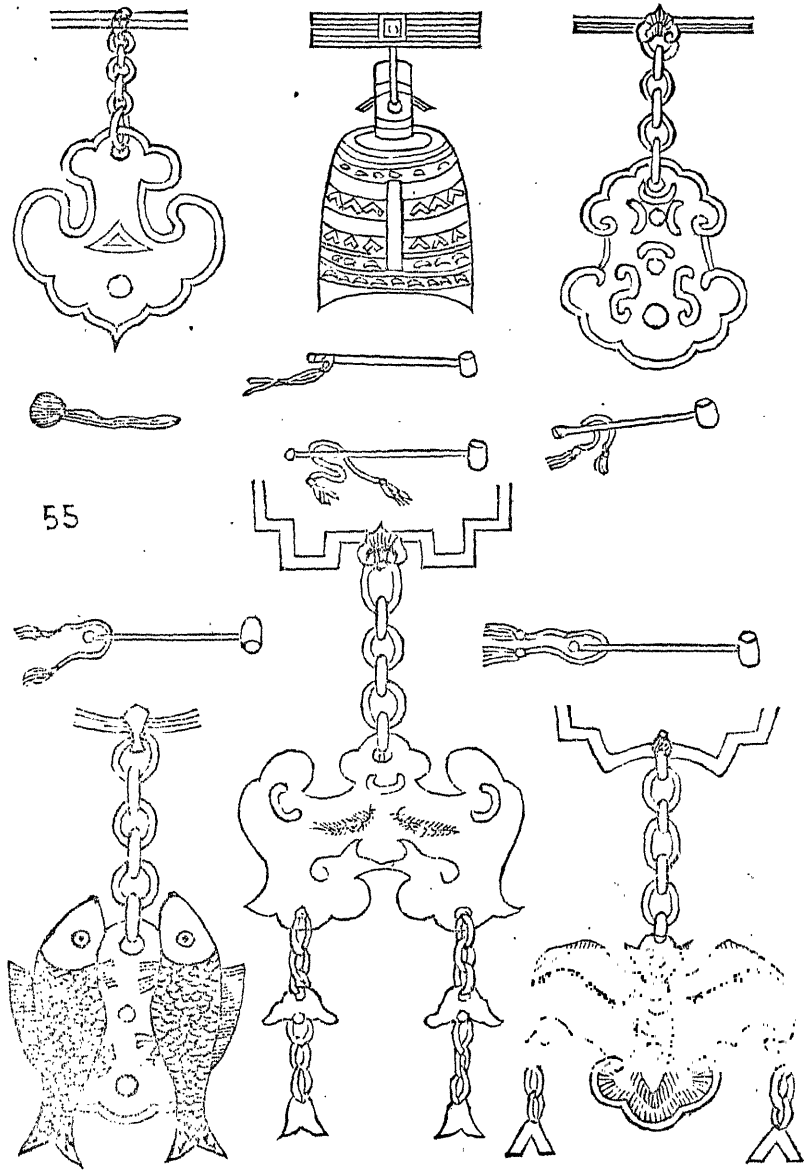
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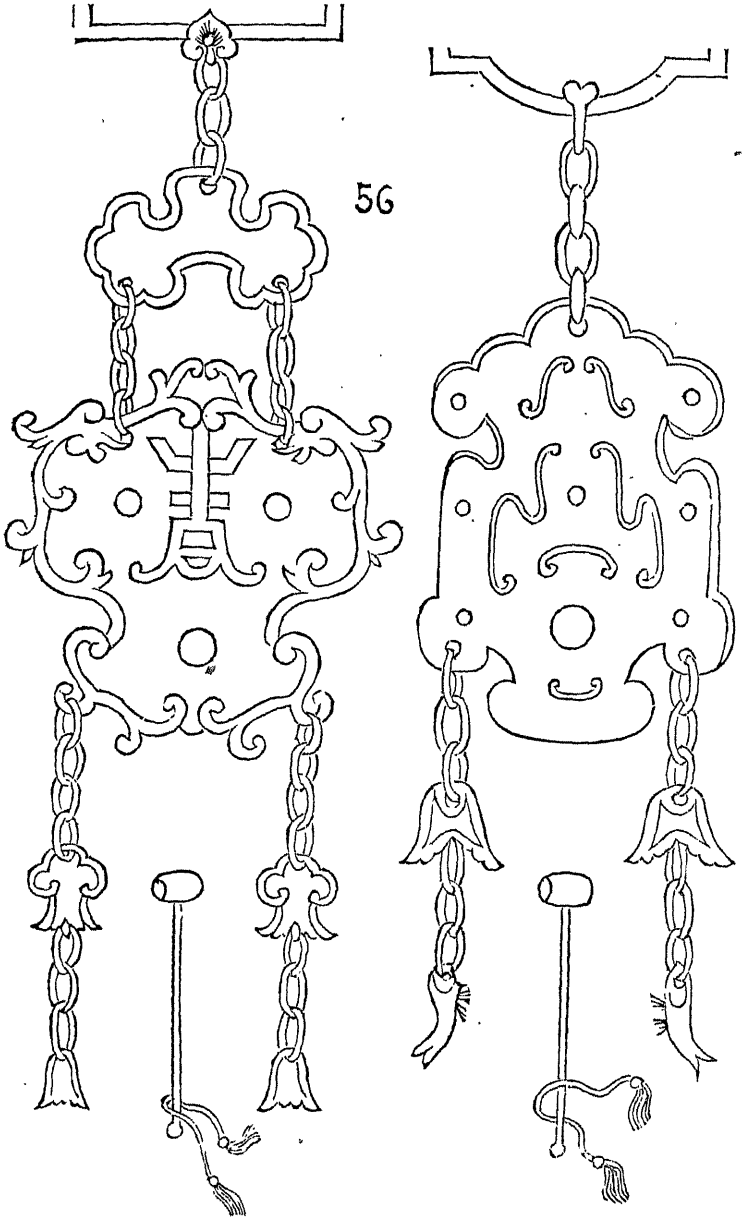
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ARTICLE VIII.

THE STONE DRUMS OF THE CHOU DYNASTY.*

By S. W. BUSHELL, B.Sc., M.D.

THE Stone Drums are generally considered by Chinese scholars and archæologists as the most important of their ancient literary monuments, as presenting in their inscriptions an example of the style of character in actual use during the early part of the Chou dynasty. The inscription ascribed to the Great Yu, which, if it ever existed has long since disappeared, has been reproduced and described over and over again by European writers, while these as far as I know have not yet been figured or described; although they are valuable contemporary records of the progress of civilization—of about the same period as the Moabite stone which has excited so much attention as a record of Semitic culture—and can be personally examined by any visitor to Peking. Even in investigations of the formation and successive changes of the Chinese character, the Stone Drums, if mentioned at all, have been dismissed with the briefest of notices, or disregarded as of doubtful authenticity,—an easy method of criticism and one which gives free play for the development of *a priori* theories. I have therefore undertaken to give a set of fac-simile engravings of the ancient inscriptions, with the corresponding modern characters appended, accompanied by a short introductory account of their probable origin and history, derived from Chinese sources.

The stones, ten in number, stand in two rows on each side of and within the principal gate of the Confucian temple at Peking, where they were placed in the commencement of the fourteenth century. Of irregular form and size, varying from a foot and a half to nearly three feet in length, and averaging seven feet in horizontal circumference, they remind one rather of short truncated pillars with rounded tops than of drums. Originally large water-worn boulders, they were probably collected from the foot of the parent mountain and roughly chiselled into their present shape. They are composed of a hard dark-coloured rock, which weathers

* Read before the Society on November 18th, 1873.

by the peeling off of thin superficial flakes. In this way the inscription engraved in perpendicular lines on one side of the circumference of each drum is gradually disappearing, from the ravages of time, and at the present day in only one of the ten does it at all approach completeness, while in one of the others not a single character remains. The inscriptions consisted of verses, each one apparently a complete ode commemorative of hunting or fishing, in the *chuan* or so-called "seal character," such as occurs on ancient tripods, sacrificial vases and other relics of the Chou dynasty. From intrinsic evidence the inscriptions have been referred by the large majority of authorities to the period of Hsuan Wang (B.C. 827-782). There is, however, no mention of the fact in the historical records of this reign, and considering the paucity and meagreness of the extant chronicles, such an omission is hardly a matter of surprise. This has always, however, been a stumbling-block to Chinese enquirers. One critic,—in that it is recorded in the Annals of the Bamboo Books, that Ch'êng Wang in his sixth year (B.C. 1110) made a grand hunting expedition to the south of mount Ch'i, where the drums were discovered,—concludes that they must be referred to the reign of this sovereign. This record, however, taken by itself is not sufficient to prove so much; it is probable on the contrary that the same district would be chosen by successive sovereigns, although it might be recorded only in one reign. A later critic, Ma Ting-kuo of the Chin dynasty, having lighted upon a similar reference in the History of the Later Chou, in which it is recorded that the founder of this dynasty made a hunting expedition to the south of mount Ch'i, was bold enough to ascribe them to this period, but his ignorance has been repeatedly chastised, and he is told contemptuously to go and examine the inscriptions of this reign still extant at Pao-ting-fu, on the carved images and on the gigantic rock figures, and see if there be the slightest resemblance in the form of any one stroke or character. Lastly Chêng Yu-chung, from the form of two of the characters, referred them to the Ch'in dynasty; but it has been shewn that similar forms were known long before; the style *Hsiao ch'uan* employed under the Ch'in being no new invention, but founded upon the antecedent *Ta ch'uan*, so that his position is also untenable. The scholars of the T'ang dynasty were unanimous in considering the drums to be genuine relics of the Chou. Under the Sung, the celebrated writer Ou-yang Hsiu was the first to question their authenticity; he propounded three doubtful points,

and his views have been adopted by a small school; we shall return to these three doubts and discuss them seriatim on a subsequent page.

Altogether there is a vast literature on the subject of the Stone Drum inscriptions, and a multitude of treatises are extant, the work of successive generations of authors from the T'ang dynasty to the present day, each one repeating the statements and arguments of his favourite predecessor *ad nauseam*. A number of these is collected in the 'Ch'in-ting-jih-hsia-chiu-wên-k'ao,' the voluminous description of Peking, books LXVIII-LXX of which are devoted to the subject, and include the verses and descriptive essays of more than one hundred and fifty authors. We have waded through these, and extracted the principal details and condensed them into the following brief historical outline.

The Stone Drums were discovered in the early part of the T'ang dynasty, lying half buried in the ground, in a piece of waste land in the department Fêng-hsiang-fu, in the province of Shensi. The earliest accounts of them were written by authors during the epoch Chên-kuan (A.D. 627-649), in the reign of Tai Tsung, the second Emperor of that dynasty. In the "Geographical Description of Provinces and Cities" published in the early part of the ninth century it is written:—"The Stone Drum inscriptions are to be found thirty *li* to the south of T'ien-hsing-hsien (a district city of Fêng-hsiang-fu) on stones shaped like drums, and are ten in number. They record a hunting expedition of Hsuan Wang of the Chou dynasty, in the writing invented by Chou-shih.* Since the Chên-kuan epoch, Su Hsü, President of the Board of Officials, Yü Shih-nan, Ch'u Sui-liang and Ou-yang Sün have been unanimous in describing these inscriptions as ancient and of great value. Long years have elapsed since the time when they were engraved, and there are now some lost and undecipherable characters, yet the remains are well worthy of attention, and it would truly be a matter of regret were the writers of geographical records not to include them."

The locality in which they were discovered was a portion of the ancestral territory of the founder of the Chou dynasty. Tan-fu (B.C. 1325), afterwards styled T'ai Wang in the sacrificial ritual of the dynasty, removed to the foot of mount Ch'i, in the present district of Ch'i-shan, in the department now called Fêng-hsiang.

* The style known as the *Tu ch'uan (Ed. Com.)*

Subsequently, after the establishment of the Chou dynasty by his descendants, the south of mount Ch'i would appear to have been a favourite resort for the imperial hunting expeditions, and it is supposed that these stones were erected in commemoration of one of them.

One of the best known pieces of the celebrated poet Han Yü, styled Han T'ui-chih, native of Ch'ang-li, a devoted admirer of these inscriptions, was written in praise thereof. Lamenting the neglect and rapid decay of such important relics of the ancient character and literature, he describes how that in the year 806 he had petitioned the Chancellor of the National University, recommending their removal to that place, and complains that no notice had been taken of his request. These verses were written in 812 on the receipt of a copy of the inscriptions from Chang Chi. This is the best description of the period extant, and we will endeavour to give a prose version.

"The scholar Chang* has brought me a set of fac-similes of the Stone Drum inscriptions; and at his solicitation I will venture to attempt a few verses on the same. There is no longer a poet in Shao-ling, and the 'heaven-born genius' is dead†—Yet my talent is too feeble for me to do justice to the Stone Drums.

"There was anarchy in the Empire of Chou, and the four borders were troubled,
Till Hsuan Wang rose up in his might, and brandished the spear of heaven;
He threw wide open the gates of his palace, to receive homage and congratulation,
And all the princes assembled, with much clattering of swords and tinkling of jade.
He made a hunting expedition to Ch'i-yang, attended by a party of gallant horsemen,
And the feathered game and four-footed beasts were gleaned from a myriad *li*.

* Chang-chi (張籍).

† Two celebrated poets of the Tang dynasty Tu-fu (杜甫) styled *Tzŭ-mei* (子美) a native of Shao-ling, and Li-pai (李白) styled *T'ai-pai* (太白) commonly referred to as *Tsê-hsien* (謫仙) "the heaven-born genius."

To chronicle his fame, record his power, and proclaim it to ten thousand generations,
Rocks were taken from the mountains, and chiselled into the form of drums;
And from among his followers, all unsurpassed in scholarship and art,
Men were selected to compose the verses, and engrave them on the stones.
Exposed afterwards to the pelting rain, the scorching sun and the flames of the wild fire,
Spiritual beings with sheltering hands watched over and protected them."

"Where, Sir, did you manage to acquire such excellent copies as these?
Complete and perfect to a hair's breadth, without discrepancy or fault.
The language is choice, the meaning profound, but it is not easily decipherable;
The style of the character being similar neither to the *li* nor to the *k'o-tou.*
Long years have elapsed, and there are necessarily some *lacunæ,*
Reminding one of a *chiao* or *t'o,* gashed by the stroke of a sharp sword.
The lines are like rows of genii, soaring on the backs of flying *luan* and *feng;*
The characters like trees, with interlacing branches of coral and green jade;
Securely fastened and bound as it were with ropes of gold and iron chains;
Safe as the ancient tripods which leaped into the water, or the shuttle transformed into a dragon."

"The ordinary scholars when they compiled the Book of Odes, did not include these,
And the two Sections thereof are narrow and contracted, and not freely expanding.
Confucius in his western travels, did not reach the Ch'in country,
So that he collected the stars and constellations, but left out the sun and moon."

"Alas! that I a lover of antiquity, was born into the world too late.
When I look at these, the tears overflowing stream in torrents down my cheeks;
I think of former days, when I was first graciously promoted to a post in the College;
The year that the national epoch was changed to Yuan-ho*
An old acquaintance of mine went with an army to Yu-fu
And measured for me the dimensions of the scooped-out mortar.
Having bathed my head and body and donned my official robes, I proceeded to address the Chancellor,
'These drums are most precious relics, and there are few such in existence,
Let them therefore be wrapped in felt, covered with matting and arranged in order.
The ten drums could be carried with the greatest ease by a few camels;
Let them all be removed to the National College, and compared with the tripods of Kao;
They will be found to exceed these in beauty and value more than a hundred-fold.
If the Emperor would graciously grant my request, and order them to be set up in the College,
Scholars would be able to investigate and decipher them, and so to increase their knowledge.
Multitudes flocked to see the classics engraved at Hung-tu,† and raised clouds of dust,
But the whole nation will run to see these in quick successive waves.

* A.D. 806.

† The College of Hung-tu was founded in the second month of the first year of the Kuang-ho epoch (A.D. 178), in the reign of the Emperor Ling-ti of the eastern Han dynasty, and contained the stone tablets on which were engraved a complete edition of the classics, after the text had been fixed by a commission of scholars appointed by the Emperor, in accordance with a memorial from Tsai Yung and other officials, presented in the year 175. They were engraved in three styles of character (the *Ku wên*, *Chuan* and *Li*) on forty-six tablets. Tsai Yung himself first wrote the inscription with vermillion ink on the stones which were afterwards engraved. When they were finished, visitors flocked to look at and copy them; more than a thousand chariots drove up daily, and blocked up all the streets and lanes in the vicinity.

Let the lichen be scraped off, the moss detached, and the columns of the inscription disclosed;
And let them be set up in perfect line, parallel and erect;
And let a spacious hall with deep verandahs be built to cover and shade them,
So that through long and distant years they may be preserved unchanged.' "

"But the great officers of the government were all intent on their own particular plans;
Too weak and feeble to undertake any additional responsibility.
The herd-boy still strikes fire, and the cows rub their horns upon them,
And there is no one to fondle them with caressing hands.
The sun burns them, the moon strikes them with its rays, they will soon be buried and lost.
For six years have I turned my eyes towards the west and heaved unavailing sighs.
The common hand-writing of Hsi is sought after for the beauty of its style,
And for a few sheets only, he was able to carry off a flock of white geese.*
Eight dynasties have flourished since the Chou, yet when conquest and battle were hushed,
No one has been found to look after these. I cannot understand this anomaly!
At the present time the Empire is peaceful and there is no important affair in hand,
Scholars and men of ability are in office, who honour Confucius and Mencius;
Will no one come forward to take up this matter, and present a memorial to the Throne?
May such a one be endowed with a spacious tongue, fluent as a falling river!"

* In the History of the Chin dynasty, in the life of Wang Hsi-chih it is recorded. He was very fond of geese. Living in Shan-yin there was a Taoist, famed for his excellent breed; Hsi-chih when he saw these was much attracted and importuned the owner to sell him some. The Taoist replied: "If you will write for me a copy of the 'Tao-tê-ching' I will give you the whole flock." Hsi-chih accepted the task joyfully, finished the copy and carried off the geese in baskets.

"My verses on the Stone Drums are concluded at this point.
Alas! alas! that my arguments should be vain and unprofitable!"

These verses, however, were not written in vain. A few years later Chêng Yü-ch'ing, then prefect of the department, had the drums removed to the Confucian temple of Fêng-hsiang-fu. Here they were kept during the remainder of the T'ang dynasty; but were again dispersed and lost from sight during the wars and troubles of the Five Dynasties. Under the Sung, literature again flourished, and Ssŭ-ma Ch'ih, when prefect of Fêng-hsiang-fu, made every effort to collect them again; he succeeded in finding nine out of the ten, and planted them in the gateway of the prefectural college. The missing one was discovered in the possession of a private individual by Hsiang Ch'uan-shih, in the fourth year of the Huang-yu epoch (A.D. 1052), so that the number was once more complete.

When the northern part of the Chinese empire was invaded by the hordes of the Liao Tartars, the Sung court fled to the south, establishing a new capital in the province of Honan named Pien-ching (汴京). In their flight they carried with them the stone drums and set them up in the city of Pien-ching in the second year of the Ta-kuan epoch (A.D. 1108). The high estimation in which these ancient relics were held is shewn by the passing of a decree at this period, ordering that the characters of the inscriptions should be filled with gold, to illustrate their value and importance to all men, as well as to prevent further injury and mutilation by the constant practice of taking rubbings and fac-similes.* At first they were placed in the Imperial Examination Hall, and afterwards removed to one of the halls of the palace, the Pao-ho-tien, built in the first year of the Hsuan-ho epoch. At

* The ordinary method of producing a fac-simile of an inscribed monument is to take a large sheet of thin cohesive paper, moisten it slightly and uniformly, and apply it evenly to the surface of the stone. This is hammered in by a wooden mallet, a small thick piece of felt being interposed to prevent too much injury to the stone. The paper is further forced into every dépression and crevice by a brush with long soft bristles. If torn at any time during the process, a small fragment of wet paper fills up the gap perfectly. Finally when the paper has become sufficiently dry, a stuffed pad of silk or cotton dipped in a mixture of ink and water of semi-solid consistency is passed lightly and evenly over the paper, which is afterwards peeled off. The result is a singularly perfect and durable reproduction, the characters of course white, on a black ground.

this period much attention was paid to antiquarian research; bronze tripods, vases, etc., with ancient inscriptions were eagerly sought after and large collections made, to be broken up afterwards when the falling dynasty became weak and impecunious; and copper became so scarce that it was decreed that all such bronze collections should be given into the various mints for the coinage of money; the keeping back of any portion thereof to be a penal offence and severely to be punished. Fortunately, however, several of the works on the subject are still extant, the largest and most important being the *Hsuan-ho Po-ku-t'ou*, which is an extensive collection of illustrations and fac-similes. The Imperial Museum is described by a contemporary visitor. "The new Pao-ho-tien, a lofty building with three rows of large pillars, was finished in the eighth month of the present year (A.D. 1119). It is surrounded by clumps of tall bamboos and rows of fine trees in thick leafy groves. The central hall is occupied by the imperial throne, the eastern and western halls are filled with objects of value and curiosities, with ancient tripods, sacrificial vases, jade ornaments, etc. There are in addition many side halls filled with various antiquities; of which the Stone Drums of Hsuan Wang occupy the first rank, preserved in the 'Hall of Ancient research.' "

When the capital of the Sung was captured by the Niuchih Tartars, at the end of the epoch Ching-k'ang (A.D. 1126), the numerous valuables and antiquities of the Pao-ho-tien, including the Stone Drums were carried off by the invaders to their central capital, the Peking of the present day, where they had established themselves as the Chin dynasty. The gold was dug out from the characters, and the drums remained more or less neglected until the establishment of the succeeding Mongol dynasty, the Yuan. In the eleventh year of the epoch Ta-tê (A.D. 1307) they were placed in the gateway of the temple of Confucius at Ta-tu (Peking), in the place where they have remained to the present day. During the Chih-yuan epoch of this dynasty the Chancellor of the University P'an-ti, assisted by the principal officials and scholars, made a full and laborious investigation of the inscriptions and deciphered the ancient characters. The results were engraved on a marble slab and erected in the same gateway; this slab is still preserved intact. To the columns of ancient and modern characters there is appended a short explanatory statement to the following effect.

"The above Stone Drum inscriptions are ten in number, the style is similar to that of the *Feng* and *Yá* odes, but much is effaced and lost so as to be undecipherable. According to tradition, they are monuments of a hunting expedition of Hsuan Wang of the Chou dynasty. They were discovered in a piece of waste ground in the department of Ch'ên-ts'ang. Chêng Yü-ch'ing during the T'ang dynasty first removed them to the city of Fêng-hsiang. During the Sung dynasty in the epoch Ta-kuan they were moved to K'ai-fêng. In the last year of the epoch Ching-kang the Chin carried them off and placed them in Yen. Under the reigning sacred dynasty, in the year *Kuei-ch'ou* of the Huang-ch'ing epoch, they were for the first time set up in two rows on either side of the principal gateway of the temple of the 'Great completer, the most holy accomplished and wise Prince.'

"It may thus be seen that they have been at one period flourishing, at another eclipsed. The origin and history of the drums, however, have been so well and fully described by former scholars that I am unwilling to dilate upon them further. I will only add that the sentence which occurs in one of the inscriptions *T'ien-tzŭ-yung-ning* 'May the son of heaven rest for ever' is such as a subject would employ in token of homage; of this there can be no doubt. Again the sentence *Kung-wei-t'ien-tzu*—'The prince says to the Son of Heaven,'—proves that the princes accompanied the Emperor on the hunting expedition, and would be employed by a subject repeating the words of his prince to the Son of Heaven. Although alas the exact time and reign to which the Stone Drums belong cannot be positively fixed, yet the strokes of the characters are perfect and antique, such as could not have been formed during the Ch'in, Han and later dynasties, and students of the ancient *chuan* style of Chou cannot but take these as their models.

"From the time I took my first degree I have been constantly passing to and fro by these drums, and have been wont to pore over and examine them, loath to tear myself away. More than thirty years have elapsed, and of the characters then extant some have already been effaced and become illegible; that being the case how many will remain ten centuries hence? For lovers of antiquity is not this a matter of deep concern? During my leisure hours therefore I have consulted the various treatises on the subject, by the authors Chên Ch'iao, Shih Sou, Hsueh Shang-kung, and Wang Hou-chih. I have also investigated and determined the sound and meaning of the characters, and had them engraved on stone, in order that students of the ancient character may have an opportunity of examining them.

"Written by P'an-ti, a *Fêng-hsūn-ta-fu*, (President of the National College), in the Chih-yuan epoch, the cyclical year *Chi-mao* (A.D. 1339) the fifth month, cyclical day *chia-shên*.

"Assisted by seven of the principal officials of the College, whose names and titles follow in order."

The results of the investigation of the ancient characters determined by this commission, have been for the most part accepted by later scholars. The corresponding modern characters are printed side by side with the illustrations of the original inscription, in the recent "Imperial description of the National University"—the *Ch'in-ting-kuo-tzŭ-chien-chih*.

Under the reigning dynasty a large number of authors have written on this subject, and laudatory verses have been indited even with the vermillion pencil. The Emperor Kao-tsung, in the fifty-fifth year of his reign (Ch'ien-lung), made a personal examination of the inscriptions. His descriptive verses have been inscribed together with those of Han of Ch'ang-li (Han Wên-kung) on a large marble tablet erected in the Confucian temple "in order that all men may be convinced that these drums are genuine relics of Hsuan Wang of the Chou dynasty." At the same time an imperial edict was issued, ordering the construction of ten new drums:—"An examination of the inscriptions of the Stone Drums shews alas! that less than one half of the original has escaped destruction, and it is much to be feared that as years pass by, even this small remnant will disappear, so that nothing will be left. Therefore with the 310 characters still extant, ten new pieces have been composed. We ourselves have composed the first and last pieces, and at our command Pêng Yuan-jui has combined the rest of the characters into eight other pieces. In all ten stanzas have been composed, an illustration of antiquity for the edification of recent scholars." When these were finished Wang Shu and Wang Yu-tun presented carefully executed copies of the original inscriptions. On the model of these copies the ten stanzas were engraved on the new drums constructed for the purpose of white marble, each stanza being inscribed on the flat upper surface of each drum instead of on the convex surface of the body as in the originals. The ten new drums are placed in two rows on the outer side of the gateway, and a duplicate set in the Confucian temple at Jehol. The verses are interesting as intellectual *tours de force*, but do not require a more detailed notice.

Having traced the drums through various vicissitudes, from the time of their discovery to the present day, we shall proceed to an examination of the inscriptions. These are now sadly defaced, as may be seen by a glance at the rubbings presented to the Society. Even when first discovered at the early part of the T'ang dynasty, there were then many lacunæ, as may be gathered from the account of Han Wên-kung and from other sources, and these gaps have widened considerably with advancing years. The original inscriptions would appear to have contained altogether about 700 characters. Ou-yang Hsiu of the Sung mentions, that in his time the number amounted to 465. P'an-ti of the Yuan in his treatise includes only 386. In the time of Ch'ien-lung the number was reduced to 310. Fortunately, however, a set of rubbings taken during the northern Sung dynasty have been preserved to the present day in the famous *T'ien-yi-ko* Library of the Fan family at Ningpo, considered to be unique examples and a principal ornament of the collection. Fac-similes of these rubbings were engraved on stone by the celebrated Yuan Yuan, when Literary Chancellor of the province of Chehkiang, in the second year of Chia-ch'ing (A.D. 1798), and placed in the College of Hang-chou-fu. Yuan Yuan was well qualified to judge of the value of these, being himself a learned antiquarian, the author of the *Chi-ku-chai Chung-ting-yi-ch'i-kuan-shih*, a description of a large collection of bells, tripods, sacrificial vases and other bronze antiquities of the Shang and Chou dynasties, one of the most important works on the subject.

The inscriptions just referred to contain 462 characters. The illustrations of the Stone Drum inscriptions in the *Chin-shih-so*, an important collection of metal and stone inscriptions, published by two brothers named Ma in the year 1821, are derived from the same source. The author Ma Yün-p'èng says—"Taking the *T'ien-yi-ko* rubbings as my models, I have had these woodcuts made on a smaller scale than the originals. I have added one or two characters from the authors Hsueh and P'an, but only after they have been proved by a careful examination to agree with the strokes of the half-defaced characters of the rubbings. I have not, however, been able to reproduce the antique force of the original style in mere copies like these." These illustrations, notwithstanding the author's apologies, are remarkably accurate and have been copied to accompany the present paper. The version given below in the modern character is also derived from the same book; it is the net result of the researches of many generations of native scholars and antiquarians.

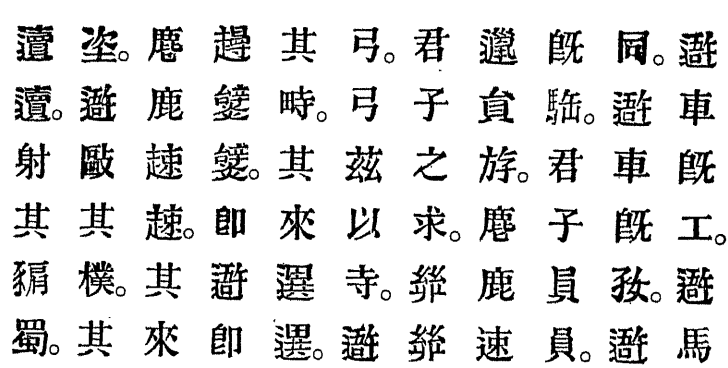
The form or style of character employed in the original inscription is that known as the *Ta ch'uan*,* so called to distinguish it from the *Hsiao ch'uan*† introduced in the time of Ch'in Shih-huang. It is known also as the *Chou wên*,‡ "The style of Chou," who was said to have introduced certain reforms in the composition of the written character. Some authors assert that the drums were engraved to serve as permanent examples of the newly-reformed characters. This opinion, which rests it must be confessed on mere assumption, has been adopted by Du Mailla, in his "Recherches sur les Caractères Chinois," appended to the Translation of the Shu-king by Gaubil:—"Le Président Tcheou, aidé des Officiers de son Tribunal, s'en occupa long-tems, réduisit sous quinze classes ceux qu'il crut qui passeroient plus aisément et qui seroient reçus avec moins de difficultés, et les présenta à l'Empereur, ce Prince les fit encore examiner par tous les habiles gens qui étoient auprès de lui, les examina lui-même avec soin, les approuva, et afin qu'on vît l'estime qu'il en faisoit, le désir qu'il avoit qu'on ne les changeât plus à l'avenir, et combien il souhaitoit que tout l'Empire les reçût, il fit faire dix grands tambours de marbre, sur lesquels il fit graver, dans ces nouveaux caractères, des vers qu'il avoit fait lui-même. Ces tambours, depuis ce tems-là, ont toujours été regardé comme un des plus beaux monuments de l'Empire.....et se voient au Kouetse-kien, ou Collége Impérial de Peking, d'où j'ai l'honneur de vous écrire, et où ils sont gardés avec le plus grand soin: ce sont là les caractères qu'on appelle encore aujourd'hui *Tu-tchuen*." The tone of this is too confident in that there is no contemporary evidence of the facts. The particular "hand-writing" of the inscription, however, is comparatively unimportant. It is sufficient that there are fair grounds for inferring from intrinsic evidence, that we have before us a contemporary specimen of the style of character actually employed in the time of Hsuan Wang, at the end of the ninth or beginning of the eighth century before Christ. This conclusion is based on purely literary grounds, from the similarity in style and language, and the occurrence even of identical lines, in various odes of the Shih-king, known to have been written during the reign of this Emperor. The drums were originally

* 大篆.
† 小篆.
‡ 籀文.

placed near mount Ch'i, the locality of the hunting expedition which they commemorate, as proved by the mention of the K'ien river in the second inscription. This was the ancestral territory of the Chou dynasty. Twelve years after the death of Hsuan Wang, in the year 770 B.C. the seat of government was transferred to the eastern capital, the city of Lo, in the reign of the Emperor P'ing Wang. Towards the end of this reign, Confucius commences his chronicle of events in the *Ch'un-chiu;* and it is highly improbable that an imperial expedition should have been made to a locality so far from the capital, without being recorded in the chronicles. Hsuan Wang was a sovereign of extraordinary vigour, and is reported to have extended the empire to its widest limits; he conducted several military expeditions, and compelled the unwilling princes to present themselves at court to pay homage. This appears to have been an expedition organized on one of these state occasions. After his death the process of disorganization went on rapidly; he succeeded several weak and incapable rulers, so that his reign formed an æra of short-lived splendour; after his death the feudal princes gradually increased in power, until the imperial rule became almost nominal.

Each inscription is a short ode descriptive of hunting or fishing, but only the first three are sufficiently perfect to be read connectedly. In the rest only the general subject of the various odes can be inferred from the characters which remain.

No. I.



Our chariots were strong,
Our steeds alike swift;
Our chariots were good,
Our steeds tall and sleek.
A numerous array of nobles,
With a waving cloud of banners;
The hinds and stags bounded on,
The nobles in close pursuit.
The strings of the black bows resounded,
The bows held ready for use;
We pursued them over the hills,
Coming on with audible roll.
In a close-packed mass,
The charioteers driving at full speed;
The hinds and stags hurried on,
We drew near upon the wide plain.
We pursued them through the forest,
Coming up one after the other,
Shooting at the same time the wild boars.

NOTES.—敔＝吾 the first personal pronoun.

工 is a contracted form of 攻＝堅 "strong." The ode 車攻 of the Shih-king commences like the above 我車既攻我馬既同. This ode celebrates a great hunting, presided over by Hsuan Wang (B.C. 827-782), on occasion of his giving audience to the feudal princes at the eastern capital of Lo (v. Legge's She-king II, iii, V, 1). In consequence of this identity, and of many other similarities in style and language, in other odes of the Shih-king known to belong to the reign of Hsuan Wang, the verses inscribed on the Stone Drums are generally referred to the same period. The author would appear to have been an officer in the retinue of the Emperor.

孜＝好.

騋＝牝 cf. She-king II, iii, V, 2, 田車既好四牡孔阜.

君子 implies the nobles and officers in attendance on the Emperor.

員＝衆.

員員 means very numerous.

弨＝關 the sound of a twanging bow-string.

鹵＝鹵 probably used for 廬.

寺 probably a contraction for 侍.

孌＝奕 defined as 衆多也.

敔＝御 "the charioteer."

豵 is a wild boar three years old.

No. II.

惟	惟	涇	其	黃	帛	濊	鰀	汧
楊	鱮	涇	朔	帛	魚	濊	鯉	殷
及	惟	鯉	孔	其	鱳	有	處	沔
柳。	鯉。	鯉。	庶。	鰷。	鱳。	鴈。	之。	沔。
	何	其	鱒	有	其	其	君	丞
	以	魚	之	鰋	篮	旂	子	彼
	臺	惟	鼈	有	氐	趯	潨	淖
	之。	何。	鼈。	鮪。	鮮。	趯。	之。	淵。

The K'ien was broad and overflowing,
In whose teeming and deep waters,
The abode of the bull-head and carp,
The nobles were fishing.
In the widest parts were the *sha*,
Swimming in sinuous curves.
The white fish were of silvery whiteness,
Making a dainty and choice dish;
There were also yellow and white bream,
And the two varieties of perch;
With which a rich savoury soup was made,
Filled with large ample slices.
The waters were full and well stocked.
Of what kind were the fish?
There were the tench and the carp.
How did we pack them?
With the poplar and the willow.

Notes.—汧 is the name of a river which rises in the district of K'ien 汧縣 in the province of Shensi, and flows north-westwards to join the Wei 渭 river. A mountain of the same name is mentioned in the geographical description of "The Tribute of Yu" (Shu-king III, i, II, 1), in close connection with mount K'i 岐山. Both are included in the present department of Fêng-hsiang 鳳翔府.

殹＝也.

烝＝蒸.

鰋＝鱷 dénoting a species of the bull-head family, probably a fresh-water Bagrus. I am indebted to Dr. Williams' kind assistance, in being able to give approximately the names of fish mentioned in these lines. It is impossible to define exactly the various species, as the fish inhabiting the inland waters of China are almost unknown to the naturalist.

潊 is the ancient form of 漁.

滿＝鰻.

鮫 is a contraction of 鯊, the term now applied to the shark family, but also given to a small fish which lies in the ooze and spurts sand and water at its prey.

鱳＝鱸.

鹽 is also written 滷 meaning the same as 鉏.

鰨＝鯁 a species of bream.

鱄 commonly written 鮒 is a species of perch common in the Tung-ting lake.

鯸＝鮑 the old sound being *po*. Here it must be read, from the exigency of the rhyme, *mien;* having the same phonetic as 綿. It is defined like the 鮒, so that it may be akin to the perch.

肭＝肭 having the meaning according to the dictionary *Po-ya*, of 臢 a soup with slices of meat.

𤆬 is an ancient form of 洋.

鱮 is a tench or a coarse kind of carp.

鯉 the carp, denotes all cyprinidæ.

No. III.

田車既安。鑾勒馵𩵦。
避衆既簡。左驂旛旛。
右驂騵騝。避以驂隋。
邊。寫。庶。旛。
鸞秀弓寺射。麋豕孔庶。
避戎止陸。麋鹿雉兎。其邊有
騝騵駉駉。避以驂隋。
出而執昊奔大
其奔奔
各亞
勿射多庶趨君子逋
樂

The hunting chariots were well-made,
The bridles and reins in perfect order,
We were all chosen huntsmen;
The left outside steeds were nimble,
The right outsiders strong and stalwart,
And we mounted to the crests of the hills.
Our warriors rested on the sword,
The state chariot was put aside,
The embroidered bows were got ready for use;
The deer and wild boar were large and abundant,
With hinds and stags, pheasants and hares.
On the high ground flags were set up.

...

We took them alive and bound them,
We drove them in numerous array,
For the pleasure of the nobles.

NOTES.—田車 hunting chariots, are mentioned in the commentary of the Shih-king, as constructed with a view to special lightness and rapidity.

鉴, pronounced like 條, signifies the metal appendages of the head-piece of the horse's harness.

簡＝選.

驂 is a character constantly met with in the Shih-king, applied to the outer two of the four horses harnessed to the chariot, the two in the centre being called 騑.

旛 is defined to be a general term for flags and banners, having here an attributive sense.

騝＝健.

隋＝升.

邊 is an ancient form of 原.

宮車＝輦車, the imperial chariot, used according to the *Chou-li* within the palace. It is here put aside to be changed for a hunting chariot.

寫＝卸.

秀＝綉.

臭 is an uncertain character, perhaps used for 臭, which signifies a large white marsh beast. This and the three preceding lines are impossible to translate, on account of the loss of several of the characters.

君子 refers probably to the princes present at the hunt, the Emperor being mentioned in a subsequent ode with the designation 天子, Son of Heaven.

遹＝攸.

As regards the remaining seven drums, a glance at the inscriptions given at another page, will shew that each one is more imperfect than the one which precedes it. It is hopeless therefore to attempt a connected version; only the general subjects of the various odes can be guessed at from an examination of the scattered characters.

In No. IV, of the first characters in each column only one remains, while more than half of the second characters have disappeared. It is an ode like Nos. I and III in praise of charioteering and shooting with the bow and arrow. The 鑾車, commonly written 鸞車, were chariots with bells; while the 酋車＝輶車 were light chariots used for hunting.* In the lines 趍趍六馬 射之矦矦—"The six steeds advanced briskly, The arrows were discharged in close succession"—the imperial team is referred to, the only one which consisted of six horses. 矦, an ancient form of 族, is here used for 鏃. The 彤弓彤矢, red bows and arrows, were given by the Emperor as a token of merit to distinguished princes. In the charge to Wên-hou in the Shu-king, the Emperor presents to the prince of Chin one red bow and a hundred red arrows.

No. V is about as imperfect as its predecessor. The subject of the ode is boating on the K'ien river, the affluent of the Wei, mentioned in No. II. The boats are spoken of as returning westwards. They appear to have been propelled by oars, 柭＝枝.

No. VI. This drum has a deep depression in the upper surface, having been at some unknown period hollowed out to serve as a mortar for pounding rice. This must have been done before the discovery of the drums during the T'ang dynasty, as it is referred to in one of the verses of Han Yü. The curious fact has been commemorated in verse by a multitude of authors, and among them by the Emperor Ch'ien-lung, who composed the stanza which has been engraved on the drum itself. The inscription, in consequence of the loss of the upper portion, has been mutilated so that the columns now consist of four characters only. The subject of the ode appears to be cutting down of trees and underwood, to clear the way for the chariots, as well as to supply fuel.

No. VII. Of this inscription less than one half has been preserved. The remnant is sufficient to indicate the subject to be also hunting and shooting. The Emperor is mentioned under the style 天子—以樂天子 "For the pleasure of the Son of Heaven."†

* *Cf.* Shih-king I, xi, II, 3. 輶車鸞鑣, "Light carriages with bells at the horses' bits."

† *Cf.* Shih-king II, iii, VI, 3.

No. VIII. Of this inscription only thirteen characters have been preserved. These have long since disappeared from the drum itself, so that it is a complete blank. Originally it appears also to have been in praise of hunting.

No. IX. This is the largest of all the drums, being by Chinese measurement 2 feet 9 inches in height, and 7 feet 8 inches in horizontal circumference at the widest part. The inscription contained fifteen columns of five characters in each, but more than twenty characters have been lost. It commences

Our rivers were clear,
Our roads were level;
Our party halted awhile,
In a spot shaded by beautiful trees.
May the Son of Heaven rest for ever!
It was on the day *ping-shên*,
In the early and bright morning;
We proceeded by the roadsides,
etc., etc.

Note.— 日惟丙申: *Cf.* Shih-king II, iii, VI, 2.
吉日庚午 "A lucky day was Kêng-wu."
避其旁道. Then, as in the present day, it would appear to have been customary to reserve the centre of the road for the imperial chariot.

No. X. The larger half is again missing. The ode commences

May the keepers most tenderly,
Early and late take care of them.
etc., etc.

The hunting is over. The deer and other animals taken alive have been removed to the "home-park" 囿 and placed under the charge of the "imperial foresters," 吳人. (吳=虞), "to be presented for imperial use" 獻用 when required, specially for sacrifice during the ceremonies of ancestral worship, as may be gathered from the detached characters 大祇, 曾, 高.

The above notes are intended to give a general idea of the nature of the inscriptions. The style of the odes is the same as that of the Shih-king, and a long string of analogous expressions has been collected by commentators, notably by Chao Ku-tsê, who

wrote in the year 1385; some of these have been alluded to in the foregoing notes. The stanzas are of irregular length, composed of lines of four syllables each, with an occasional line of five syllables, the rhymes occurring at various intervals. This is the normal metre of the ancient poetry as preserved in the Book of Odes.

The style of the character as mentioned before is the *Ta ch'uan*, of a more antique form than that preserved in the Shuo Wên—the ancient dictionary of the Han dynasty. It forms as it were a fossilized stratum of the transition period, when the original hieroglyphics were being gradually converted into the characters in current use, in which the radical and phonetic are generally to be distinguished. For instance the character 囿 signifying a park enclosed by walls, which consists of trees within an enclosure is now replaced by the modern form 囿 composed of a radical 口 and phonetic 有. Of the characters now written 麀鹿 "hinds and stags," the second in the inscription is surmounted by a double combination of strokes, representing probably the horns of the hieroglyphic, of which there is no trace in the modern form. The rounded lines of several of the more simple characters preserve a semblance of the first hieroglyphic form, such as those for "horse," "fish," etc. There are two other points noticeable in these characters, which were frequently met with in other ancient inscriptions, the constant omission of the radical *e.g.* 丱 for 關, 隹 for 椎, 可 for 何, etc. and the substitution of a radical different from that in common use *e.g.* 騝 for 健, 鑾 for 鸞, etc. Some of the characters of more complicated form have been replaced by others of simpler construction, *e.g.* 邊 for 原. Many of the characters have not been met with in any other place, so that the reading has to be "chiselled out" from the combination, or the sound guessed at from a comparison of the rhyme. This has been the chief difficulty in the decipherment.

If the odes engraved on the Stone Drums had been preserved in their integrity, we should have had a connected account of one of the grand hunting expeditions, of which some other details have been preserved in various pieces of the Book of Odes. There is a previous gathering of the nobles and feudal princes at the imperial court, on which the expedition is organized to proceed to one of the half-settled forest districts on the borders of the Chou empire. The Emperor is driven in a chariot drawn by six horses harnessed abreast, with trappings adorned with metal ornaments

and bells, while the nobles and princes ride in four-horse chariots, each surrounded by a numerous retinue bearing flags and banners. When they come to a wide river, a fleet of boats propelled by oars is found ready to convey them. When the proposed hunting grounds are reached, the state chariots are laid aside and a lighter and swifter kind specially adapted for the chase, drawn also by a team of four horses, used instead. These are marshalled in the clear open space, into which the stags and various kinds of deer are driven from the surrounding hills and woods by an army of beaters. The chariots are then driven into the midst of the herd, and the master, standing erect behind the charioteer, shoots down the game on all sides with bow and arrow. The herd is scattered in all directions; the chariot driver singles out one of the wounded deer, and follows it over hill and dale, and between the trees of the forest, until it is brought down. At another time the meet takes place in the midst of a large plain, when the grass and bushes are set fire to, and the game collected by this means. Occasionally larger and more dangerous game was pursued, the rhinoceros in the low swamps, the bear and panther in the forests, and even the tiger. The third and fourth odes of Pt. I, Bk. vii, of the Shih-king celebrate the archery and charioteering of Shu-tuan, the brother of the prince of Ch'êng, and he is described as seizing a tiger with bare arms. The wild boar too was hunted with especial zest. Among the smaller game are mentioned the wild cat, foxes and hares, as well as pheasants and wild-fowl. The hunting expeditions of the Chinese remind me vividly of those of the ancient Assyrians, the many circumstances of which are depicted on the sculptured monuments, on which the King is seen erect in his chariot armed with bow and arrow, pursuing the wild bull, the deer and the ibex, or engaged in close combat with a lion. The fishing scenes also appear to be analogous. A good description of a more modern imperial expedition, a grand hunt *en battue*, of the Emperor K'ang-hi among the hills of eastern Mongolia, by the missionary Gerbillon who was present on the occasion, may be found in the fourth volume of Duhalde. The bow and arrow was still the principal weapon and the chief events are precisely similar to those of ancient times, excepting that saddle-horses have displaced the more cumbrous chariots. The Emperor is mentioned as shooting the deer and antelope, bringing down the pheasant on the wing, or engaged in personal contest with the panther and the tiger.

Some of the animals were taken alive, and turned into the enclosed park in the neighbourhood of the capital, to be preserved for sport or for the supply of the imperial table, as well as to afford victims for the grand sacrifices. Mencius (I, ii, II.) says that according to the records, the park of Wên Wang was seventy *li* square; that of Hsuan Wang of Ch'i, alluded to in the same dialogue, being forty *li* square. Under the reigning dynasty there are several enclosed parks in the neighbourhood of the capital, the largest called the *Nan-hai-tzŭ* three miles south of Peking being more than a hundred and fifty *li* in circumference, surrounded by a brick wall. It is full of deer, antelope and roebuck, including the curious *ssŭ-pu-hsiang* the Elaphurus Davidianus discovered there by the Abbé David, the native locality of which has not yet been certainly ascertained.

As a sequel to these desultory remarks, it is necessary to discuss shortly the question of the authenticity of the Stone Drums as contemporary monuments of the Chou, which has been doubted by some Chinese authors. The celebrated scholar of the Sung dynasty Ou-yang Hsiu was the first to propound doubts on the subject, which I will give as far as possible in his own words, extracted from the Chi-ku-lu. He writes:—"The Stone Drum inscriptions were not originally seen or described by the older authors until the T'ang, under which dynasty many authors discussed them. Of these Wei Ying-wu considered the drums to belong to the time of Wên Wang, inscribed with verses during the reign of Hsuan Wang, while Han T'ui-chih referred them positively to the time of Hsuan Wang. At the present time they are in the Confucian temple of Fêng-hsiang-fu, the drums being ten in number. In former times they lay neglected in the wilderness, until Chêng Yü-ch'ing had them removed to the temple. Subsequently one was lost, but it was again discovered in the fourth year of the epoch Huang-yu by Hsiang Ch'uan-shih, in the possession of one individual, so that the number was once more complete. On the inscriptions there are still legible 465 characters, but more than half have been destroyed and lost. In my collection of ancient inscriptions, there is not one so old as these. Yet there are three doubtful points which suggest themselves to me.

"There are many monuments of the time of the Emperors Huan and Ling of the Han dynasty preserved to the present day. Less than a thousand years have elapsed and the characters are large and deeply engraved, but yet eight or nine-tenths have become

illegible. As to these drums, according to the historical calendar, from the first year of the minority of Hsuan Wang to the present —the eighth year of the Chia-yu epoch—there are no less than 1,914 years; the drum inscriptions are small and not deeply cut, and is it logical then that they could have been preserved. This is my first doubt.

"The characters are ancient and well executed, the language is identical with that of the odes of the Ya and Sung, while exclusive of the records preserved in the Shih and the Shu, of literary remains of the Three Dynasties these only remain. Yet during the Han and later dynasties, of the many antiquarians and collectors of curiosities, no scholar alluded to or mentioned them. This is my second doubt.

"Under the Sui, large libraries were collected, of which an official catalogue is extant comprising the stone inscriptions of Ch'in Shih-huang, Buddhistic and foreign books; all such works even are included, only these Stone Drum inscriptions being absent. That such distant objects should be collected while things close at hand were left out is not likely. This is my third doubt.

"In the books written by the older authors, although ancient, distant and marvellous things were recorded, including many of pure invention and difficult to be believed, yet no record of these drums has been quoted, and I am ignorant of the source whence the two scholars Wei and Han obtained their knowledge that the drums belonged to the time of Wên or of Hsuan. However, during the Sui and the T'ang, the collection of ancient and modern books and records was most complete, and may be it included some which we do not possess in the present time. Moreover Han T'ui-chih was versed in antiquity, and not given to making unfounded statements, and I will therefore accept his dicta as my authority. With regard to the style of the characters, they are such as no one but the historian Chou could have traced."

The solution of these doubts has been attempted by another scholar who lived also under the Sung, the author of the "Fu-chai-pei-lu," a collection of ancient inscriptions. He writes,—"The Stone Drums are monuments with inscriptions commemorating a hunting expedition of Hsuan Wang of the Chou. They were first described during the epoch Chên-kuan (A.D. 627-650) of the T'ang dynasty. Su Hsü, Li Ssŭ-chên, Chang Huai-ch'üan, Tou Chi, Tou Mêng and Hsü Hai were unanimous in considering them to be relics of the pencil of the historiographer Chou; and Yü Shih-

nan, Ou-yang Hsiu and Ch'u Sui-liang all praised the beauty of the style, so also Tu Fu in his verses on the different styles of writing, describing those of the various dynasties, places this midway between the original hieroglyphic and the style introduced under the Ch'in by Li Ssŭ. Later, Wei Ying-wu and Han Yü described them more fully and minutely. During the present (Sung) dynasty Ou-yang Hsiu, author of the Ch'i-ku-lu, was the first to suggest doubts, adding that the statements of Wei and Han were without authority. Later writers have quoted these doubts with exaggerations and additions.....and there are still living, men who are sceptical on account of their statements; so that I cannot but discuss them.

"As to the first doubt of the Chi-ku-lu, founded on the comparatively larger gaps in the monumental slabs of the Emperors Huan and Ling of the Han, I answer:—The preservation or destruction of monumental inscriptions depends mainly on the hard or soft nature of the stone, and on the number of rubbings taken, as well as on the relative exposure to water, fire, wind and rain. The mere date cannot be taken as an absolute criterion. Take for instance the Tsu Ch'u inscription engraved in the time of Hui Wang of the Ch'in, not long distant from Hsuan Wang: the inscription is far finer and less deeply cut, than that of the Stone Drums, but in that it was dug up in these latter years it has not been exposed to hurt or injury, and consequently not a single character is missing. On the other hand the 'kan-lu' characters, engraved by Yen Chên-ch'ing in the ninth year of the Ta-li epoch, have been freely exposed and many rubbings have been taken from them for sale; so that in the fourth year of the K'ai-ch'êng epoch, although only sixty-six years had elapsed, there were already changes and deficiencies. These facts shew clearly that the length of years is not sufficient in itself to account for relative preservation or destruction.

"To the second doubt, founded on the fact that during the Han and later dynasties, of the many antiquarians and collectors of curiosities, no scholar alluded to or mentioned them; and to the third doubt that these inscriptions were contained in none of the extensive libraries of the Sui dynasty; I answer,—A large number of metal and stone antiquities with inscriptions, have lain amid heaps of stone and brick concealed from view during successive dynasties, until they were brought before the notice of later scholars. Sacrificial bronzes of the Three Dynasties have been discovered in these latter years of most excellent workmanship and form, of which the older authors Ma Yung and Chên Yuan knew nothing.

Again, the before-mentioned Tsu Ch'u inscription, the style of which is perfect and excellent, has met with no depreciators, although during the Ch'in, Han and later dynasties, for many centuries they remained buried under water or earth, until they were discovered in our own time. Why is it not similarly argued that this also was not known to our predecessors, nor is it noticed in the Sui lists, and that consequently it must be a modern forgery?

"I cannot help thinking that there must have been a record in the books, of the inscriptions of these drums, and that they have been scattered and lost during the troubles and rebellions of successive dynasties. After the rise of the T'ang dynasty, when literature again began to flourish, scholars proceeded to notice and describe them, so that they were once more made known to contemporary authors. Refer for instance to the descriptive account of Su Hsü, and you will find a corroboration of my ideas. Altogether the fact that the drums were unnoticed by authors of the Sui dynasty, is not sufficient to throw discredit on them.

"Lastly, under the T'ang the collections of books were much more complete than at present, so that contemporary writers would hardly dare to invent unfounded statements. From the Chên-kuan epoch the propositions of all the authors on the subject were unanimous, as it were by one man, so that Wei and Han were not singular in their opinions."

This appears to me a complete solution of the doubts proposed by Ou-yang Hsiu, who himself did not deem them of sufficient weight to enable him to brand the inscriptions as false, but concluded his essay by accepting the dicta of Han Yü. Some of his followers have gone further, but have been unable to find anything to strengthen the reasoning in the slightest degree, depending simply on the authority of Ou-yang. This, it must be allowed, is generally to be relied on, but in the present case it is overborne by a vastly preponderating weight of authority on the opposite side. No motive has been suggested to account for forgery on so large a scale. If we accept the train of reasoning of Ou-yang we must reject all the sculptured monuments of Egypt, Assyria and Persia which have been brought to light in such profusion of late years.

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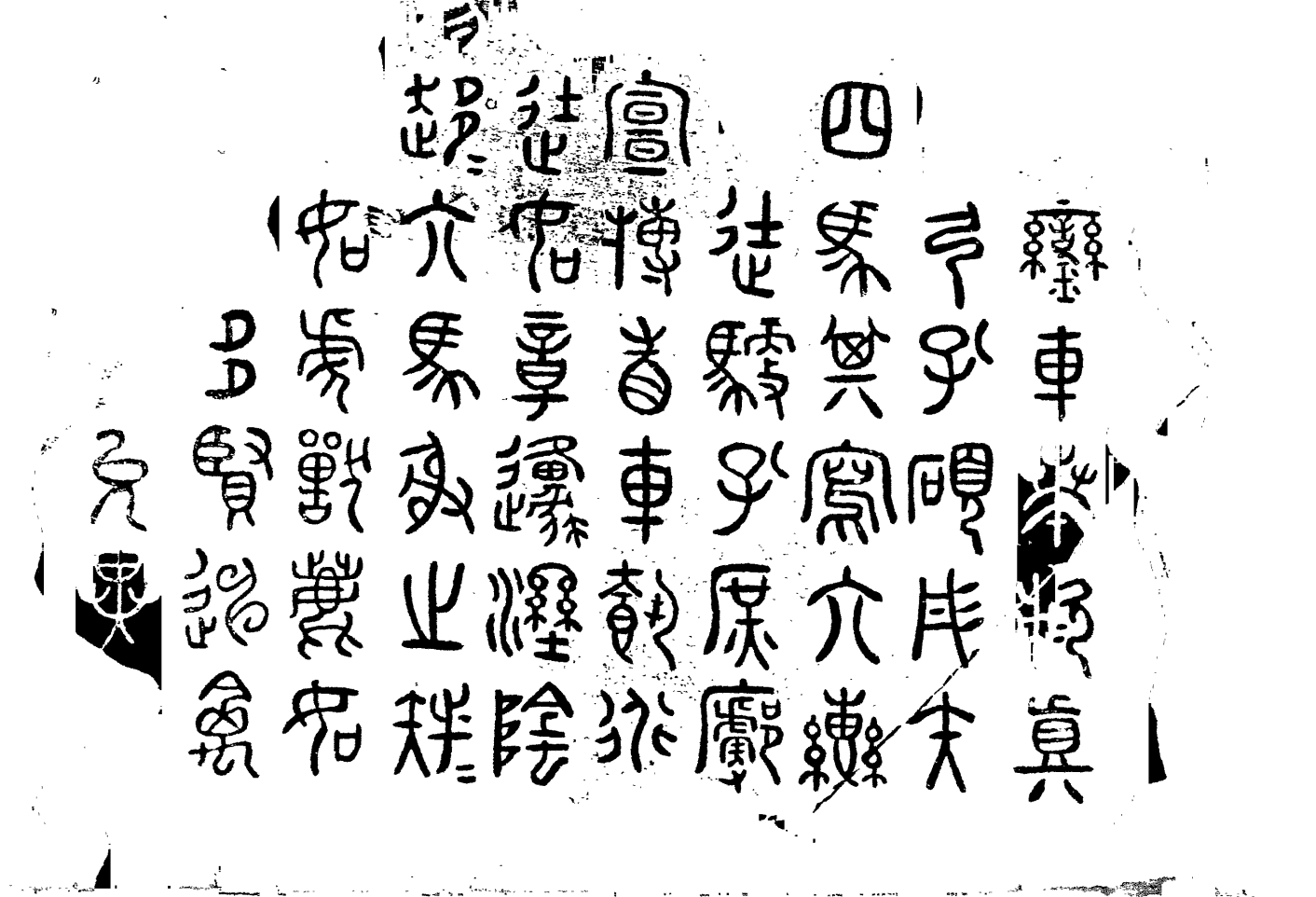
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趨	簍	〃	即	避	即	時			
麋	鹿	趨	〃	其	來	大			
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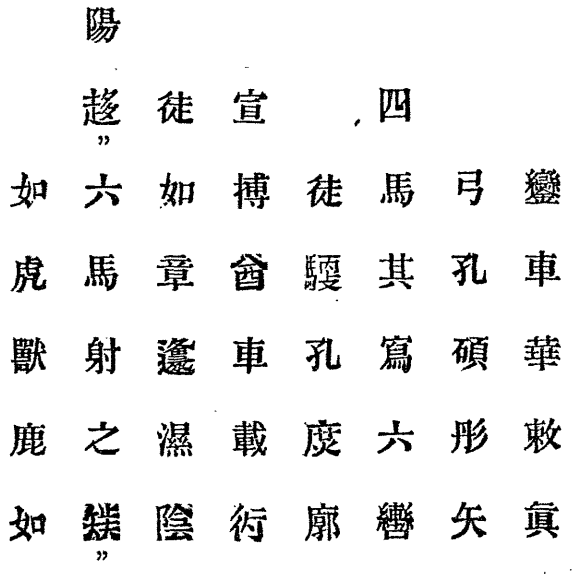
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鰋鯉處之君子潾
之濆有鴋其旂趯〃
帛魚䲹〃其籧氏鮮
黃帛其鰷有鱒有
鯉其蚓孔庶鬻之
鱒〃涇〃趠〃其魚惟何
惟鱮惟鯉何以橐
之惟楊及柳

No. III.

田車孔安鑾勒軒"
避衆既簡左驂旛"
右驂騵"避以隋于
邊避戎止陸宮車
其寫秀弓寺射麋
豕孔庶麃鹿雉兎
其邊有旛其奔"
大出各亞
具執而勿射多
庶趯君子逌樂



No. IV.



鑾車華敕眞
弓孔碩彤矢
四馬其寫六轡
徒騶孔庶廓載衍
宣搏酋車邊濕陰
徒如章射之雉"
陽趍"六馬
如虎獸鹿如
多賢迪禽
允異

No. V.

滋 陰
鞫 迄 渢 霊
君 子 即 涉 盈 雨
游 汧 阪 洎 〃 淈
〃 〃
〃
舫 舟 西 歸
自 鄜 徒 馭
佳 舟 以 道 或
或 陽 板 深 以
于 水 一 方
止 其 奔
其 其 事

No. VI.

獻作原作
導徒我冶
除帥彼陟
莫爲世里
微〃攸罟
鼉柞棫其
鼖〃鳴其
亞箸其華
爲所旂鼖
盩導旨樹
吾

No. VII.

復　　弓
　　矢
　　孔
其　　庶
寫　不　滔　　而
具　具　是　　左
肝　具　"　　
具　奪　熾
來

古　　嗣　　王
我　　樂　　天
來　　始　　子

No. VIII.

彼走騏〃馬薦
其微〃雉立
之一

晢
莽

No. IX.

澨水既瀞澨
導既平澨
既止嘉樹則
里天子永寘
日惟丙申旭"
澨其旁道
馬既迪赦
康駕
左驂騑"
驪"戲
毋不
轙鬲
公謂大
余及如
害不余
及

No. X.

吳人憐亟朝夕敬惕
載西載北勿奄勿伐
而　　獻用
　　大　祝
　　鹿　大"
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ARTICLE IX.

RETROSPECT OF EVENTS IN CHINA FOR THE YEAR 1873.

THE most noteworthy occurrences in China in the year 1873 are, perhaps, those connected with the Emperor's accession to power, and his reception of the Ministers of Foreign States: The twenty-sixth day of the first Chinese moon (Sunday, the 23rd February) was the day fixed by an Edict of the Empress-Dowager for the formal assumption of the government by the young Emperor. The occasion was marked in the usual manner by Foreign ships of war in Chinese ports, but no symptoms of interest —still less of enthusiasm—among the natives themselves were observed. Even at the Arsenals and other government establishments no notice seems to have been taken of the event. One of the first public duties undertaken by the Emperor was his visit to the Tombs of his family, in which he was accompanied by the Empress, the two Empresses-Dowager and a large retinue. The journey and return occupied nine days, and though the Emperor in accordance with usage travelled in seclusion, he allowed himself to be seen by many natives and also by foreigners.

The reception of the Foreign Representatives took place on the 29th of June at 9 o'clock A.M. in a pavilion of the temple Tsze-kwang-koh, where the Envoys from tributary states are usually granted audience. The Ambassador of Japan was first introduced to His Imperial Majesty, and after him the Ministers of Russia, the United States, Great Britain, France and Holland, were admitted to the presence. The Ministers having laid their several letters of credence on a table before the throne, General Vlangally, the Russian Minister, as Dean of the diplomatic body, read a short address, which was replied to in conventional phrase by the Emperor speaking in Manchu, which was translated into Chinese by the Prince Kung, who knelt during the ceremony. At the close of the general Audience M. Geoffroy, the Minister of France, presented a special letter from the President of the French Republic on the subject of the Tientsin Massacre. Thus ended the great ceremony, by which foreigners expected the Sovereign of

China was to have formally surrendered his claim to universal supremacy, but the suppression of any notice of the Audience in the *Peking Gazette* leaves it a matter of doubt whether the Chinese Government attached any such significance to the pageant.

The success of the imperial arms against the Mahomedan insurgents in the South-west and North-west during the year have been marked and decisive. With the capture of Ta-li-fu in 1872 the rebellion in Yunnan was completely extinguished, and early in 1873 Tso-tsung-tang, Governor-General of Shensi and Kansuh, after a severe struggle, drove the Mahomedans of Kansuh from their last stronghold near Suh-chow. It is, perhaps, superfluous to add that the usual massacre took place on this occasion. The Government of China thus delivered from all its enemies, now enjoys a peace more unbroken probably than it has known for several generations.

The exertions of the Government to strengthen its means of attack and defence along the sea-board continue without abatement, but the disposition to dispense with the services of foreigners becomes more and more marked. At the Foochow Arsenal where so much valuable work has been done under the able direction of M. Giquel, it is reported that the contracts with the foreign employés will not be renewed; at the Shanghai Arsenal foreigners occupy a less important position than formerly; and the Camp of instruction in foreign drill at Fêng-whang-shan was broken up, and the foreigners in charge dismissed in June last.

The China Merchants Steam Company has made great progress in the year, some useful vessels have been added to its fleet, and arrangements have been made for the consolidation of the Company on a large scale. Apart from this enterprise there is nothing worthy of note in the way of progress among the Commercial Chinese, and the Steam Company depends more on official subsidies than on any elements of success inherent in itself. The old route by which the Rice Tribute from the provinces of Chekiang and Keangsoo was forwarded to the Capital having many years ago become obstructed, partly by the change in the course of the Hwang-ho and partly by the general neglect of public works, under which the Imperial Canal has been allowed to silt up, the necessity of transporting the Grain by sea has long been recognized by the Chinese Government. The superiority of foreign-built over native vessels for this service was also too self-evident to be long overlooked by the officials interested in the Grain transport,

and the establishment and subsidizing of a fleet of native-owned Steamers was a natural result of the circumstances of the time. The condition of the Grand Canal has been the subject of many memorials from Chinese officials, the most important of which is from Li-hung-chang, Viceroy of Chihli, which appeared in the *Peking Gazette* of August 18th. The object of that State paper appears to be to demonstrate the hopelessness of restoring the Yellow River to its old channel, and the inadvisability of making use of it again, even if practicable, as a feeder for the Grand Canal. It is in fact to the turbid waters of that wayward stream that the Viceroy attributes the silting up of the Canal, and he argues that to divert the river from its present northerly course to its old bed would simply be to perpetuate the cause of the vast expenditure of money and labour, which he shews to have been required by the Grand Canal and Yellow River for many centuries past. The conclusion of the Viceroy is that the continuity of the Grand Canal must be abandoned, and that the Ocean high-way must be considered the Imperial Grain route for the future. Beyond such local dredging therefore as may be required to facilitate local traffic, the Canal as an imperial work will henceforth be left to itself. Li strongly urges that the present bed of the Hwang-ho be protected by dykes to prevent any future overflow or change of course.

The necessity of such precautions has unhappily again been brought home to the Government by a repetition of the summer floods in the province of Chihli in the department of Shun-tien fu (Peking); by similar visitations in Shing-king; in Hunan, and other parts of the Empire, some of which were sufficiently serious to call for imperial assistance to avert the horrors of famine.

As is usually the case, while destructive floods lay waste some districts in China, other portions of the country are visited by severe droughts. Much apprehension was felt during the summer of 1873 that the long absence of rain in the Rice districts of Keang-su and Chekeang would cause scarcity of food in those densely peopled provinces, but the loss proved less serious than was feared, and the reserve supplies from previous harvests seem to have sufficed to make up the deficiency without even calling in the aid of foreign commerce to import grain from abroad.

Various tentative efforts to introduce foreign improvements into China have been made during the past year, among which may be mentioned the importation of a Road Steamer into Tientsin

(which, however, has had a small chance of a successful career owing to the inundations); the purchase by a company of foreigners of a strip of land, nine miles long, connecting Shanghai with Woosung, along which it is contemplated to lay a line of rails; and in connection with the last named scheme the idea of introducing tramways into the English Settlement in Shanghai has also been discussed. A scheme for presenting the Emperor of China with a short line of railway was mooted in London in the summer of 1873, and met with sufficient support from capitalists to prove how much interest is felt in Europe in the material advancement of the Chinese Empire. The obstruction to the entrance of the river Hwang-poo has again been matter of general and earnest discussion among foreigners, and the Foreign Representatives have been urged to press the question on the Chinese Authorities with a view to having a proper Dredger employed in clearing away the silt at Woosung. Among projected improvements may be mentioned the proposal, emanating from foreigners, to establish a Life-boat service on the Chinese Coast with a view to mitigating the disasters of shipwreck.

The hospitality of the natives of China and the adjacent islands to shipwrecked persons has frequently been a topic of gratifying remark, and it has been the wise policy of Foreign Governments to shew the value which civilized nations set upon the lives of their subjects and citizens by making public acknowledgment of such acts of kindness. Two instances of this deserve notice in the chronology of 1873. The British ship *Benares* was wrecked on the Great Loochoo island in October 1872, news of which reached Shanghai in December. H. B. M. S. *Curlew* was promptly despatched to the scene of the wreck, and returned to Shanghai with the survivors of the crew, who had been well cared for by the Loochooans during their sojourn on the island. The *Curlew* was again sent to Loochoo in November bearing presents from the British Government to the King of Loochoo, and great rejoicings and much interchange of kindly sentiment took place between the English officers and the Loochooans. On May 31st the British steamer *Drummond Castle*, bound from Hankow to London with a valuable cargo of Tea, was wrecked on Chinsan island of the Chusan archipelago, and a portion of the crew found food and shelter with the islanders. H. B. M. S. *Rinaldo* was despatched to the place in the following month with a present of one hundred dollars to the headman of the village, and a tablet commemorative

of the good deeds of the villagers to be erected in the temple, in which the shipwrecked men found refuge.

The foreign political intercourse of China has developed in the past year in more than one direction. The Retrospect of 1872 recorded the new-born interest of the Chinese Authorities in the welfare of the emigrants from their shores, and the results of discussion on the Macao coolie trade were alluded to. Out of these circumstances have grown two missions—a Peruvian Mission to China, and a Chinese Mission to Cuba. The Peruvian Envoy, Captain Garcia y Garcia arrived at Shanghai on October 9th, and proceeded to Tientsin, where he exchanged visits with Li-hung-chang, Viceroy of Chihli, and commenced negotiations for a Treaty between Peru and China. The Chinese Mission to Cuba has for its object an investigation into the condition and treatment of Chinese emigrants to that island, and is to be entrusted to some of the Foreign Commissioners of Customs.

Geographical exploration in the Far East has made important progress in the opening up of Hoongkiang river, through the province of Tonquin, by a French expedition. Two small steamers engaged by M. Dupuis to carry munitions of war to the Viceroy of Yunnan, left Hongkong on October 25th, 1872, and after some detention at the mouth of a river called the Cuacum, they ascended it and reached the Hoongkiang or Red river, by which they proceeded to Hannoi, the capital of Tonquin, where the expedition arrived on December 22nd. At another season the steamers could have ascended still higher up the river. Availing themselves of the information brought back by M. Dupuis and his companion, M. Millot, the French Authorities of Saigon commissioned the late M. Garnier to lead an expedition into Tonquin with a view to extending the French protectorate over the tribes bordering on Annam and China, and of opening the region to European trade. The objects of this expedition and the sad fate of its leader will be best described in the following memoir by the friendly hand of our Librarian, Mr. Cordier.

LIEUTENANT FRANCIS GARNIER.—(French Navy.)

Hardly nine months have elapsed since the members of the Royal Asiatic Society (2nd June, 1873) listened to an account of the expedition sent in 1866 by the French Government, up the great river Meikong, which forms one of the most interesting chapters of the history of the attempts made by Europeans to open to trade a road between India,

Indo-China and Yunnan. Its leader had been lately residing in Shanghai —he had been elected a Member of our Institution—and the very evening of that meeting he had presented our Library with the truly magnificent work which not only tells the story of the hardships suffered, of the privations endured, of the dangers met at every step, but also of the glory achieved during three years of travel to find a channel to bring together China and the Indo-Chinese Peninsula, and, if possible, to snatch from the plateau of Thibet the secret of the origin of the great streams which water Eastern and South-eastern Asia. All of us have heard of the tragical death of Mr. Francis Garnier, all of us have felt that a career which would have been most useful and brilliant, had been brought to an untimely end. When Mr. Wylie paid to the memory of Stanislas Julien the just tribute of praise which the Professor of the Chinese language at the Collége de France so much deserved, we thought that science had suffered a great loss, but we also thought that the celebrated sinologue had been fully rewarded for his labours by the wealth he had acquired, the honours which had been heaped upon him, and by the fame attached to his name. Not so with the explorer of the Meikong river, who, carried away in the prime of life, before he had accomplished all that we were led to expect from him, leaves behind him a work unfinished, and a family which had shared his toils and anxieties but had not yet reaped any benefit from them.

As a countryman and as a friend of Mr. Garnier, I hope I may be allowed to retrace in a few brief words the principal events of his life.

Marie Joseph François Garnier, known under the name of Francis Garnier, was born on the 25th of July, 1839, at St. Etienne. After following the usual course of studies at the Naval School which he entered in 1855, he was appointed an aspirant (1857) and an Ensign (1860). Two years later we find him Inspector and Prefect of the district of Cholen (Saigon), a post he held till 1866, when he was chosen as the coadjutor of Captain Doudart de Lagrée in the expedition contemplated by the French Secretary of the Navy (M. de Chasseloup-Laubat). One year before, Mr. Garnier had been promoted to the rank of a Lieutenant. When such a work as the one published by Mr. Garnier under the auspices of the Government is in our Library, and may be easily referred to, and after the lecture delivered by Mr. Viguier, it is unnecessary for me to dwell upon the story of the expedition and to recount once more how Mr. Garnier, after a bold reconnaisance up to the Mahomedan stronghold, Ta-li-fu, found his chief dead at Tong-chouen (1868), how after taking command he brought back to Shanghai (12th June, 1868) his fellow travellers. Numerous honours have shown the importance given to this exploration by the scientific world. The Société de Géographie de Paris gave in 1862 the large gold medal to the two chiefs of the party; the Royal Geographical Society awarded the Patron's Medal (1870) to Mr. Garnier, who obtained also from the International Geographical Congress of Antwerp one of their special Medals, the other one being given to Dr. Livingstone.

During the war, Mr. Francis Garnier served in the army defending Paris and he published in 1872 under the title of "Le Siége de Paris;

Journal d'un officier de marine attaché au * * * secteur," some notes he had published in July and August, 1871, in the newspaper *Le Temps*. When the peace was concluded he finished the official narrative of the expedition of 1866-68.

He had come back to China with the intention of preparing himself by the study of local dialects to undertake some travels in Thibet, when he was suddenly called by the Governor of Cochin-china to take charge of the expedition destined to carry out the designs of the French Government in Tonquin.

The first negotiations were successful; but Mr. Garnier having made a reconnaisance at the head of fourteen men, advanced alone too far into the interior, and having fallen accidentally into a ditch near an entrenched village, he was surrounded by the natives and mortally pierced with spears (December 21st, 1873). A young officer of the navy and two sergeants who accompanied him were killed at the same time. So ended the eventful life of a man who, after having narrowly escaped the deadly fevers prevalent in the country he had explored during two years, after having faced for many months the bullets of numerous enemies, came back to the first field of his labors only to perish miserably in an ambush without being able to defend himself.

HENRI CORDIER.

A French missionary, the Reverend Père Hue, and a native priest were murdered by a mob in the city of Kien-kiang hien in Szechuen, whither they had gone to take up their residence under full official authorization.

A Protestant missionary difficulty at Hangchow, which caused some dispute with the Chinese Authorities in 1872, was brought to a satisfactory termination by the removal of the house objected to as influencing the Fêng-shui. A suitable site in another quarter was given to the Missionaries by the officials, and full indemnity was granted for the cost of re-building on the new site.

Apprehensions of Cholera invading China from the south were prevalent during the summer and autumn. The city of Bangkok was ravaged by the disease in July and August, and a less important outbreak occurred at Singapore. The usual precautions were taken to exclude infection, and the malady did not reach China. In the city of Hangchow, however, an epidemic of this type broke out in the autumn, and raged for some months.

Arrangements are understood to have been made for constituting Shanghai a port of registry for British shipping, a measure which is expected to benefit trade by facilitating the transfer of ships, and somewhat to improve the position of the Port of Shanghai.

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